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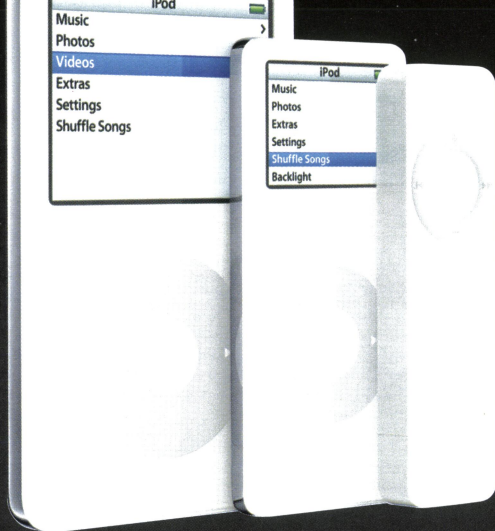
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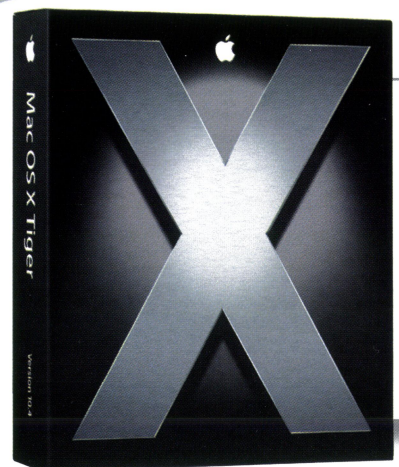


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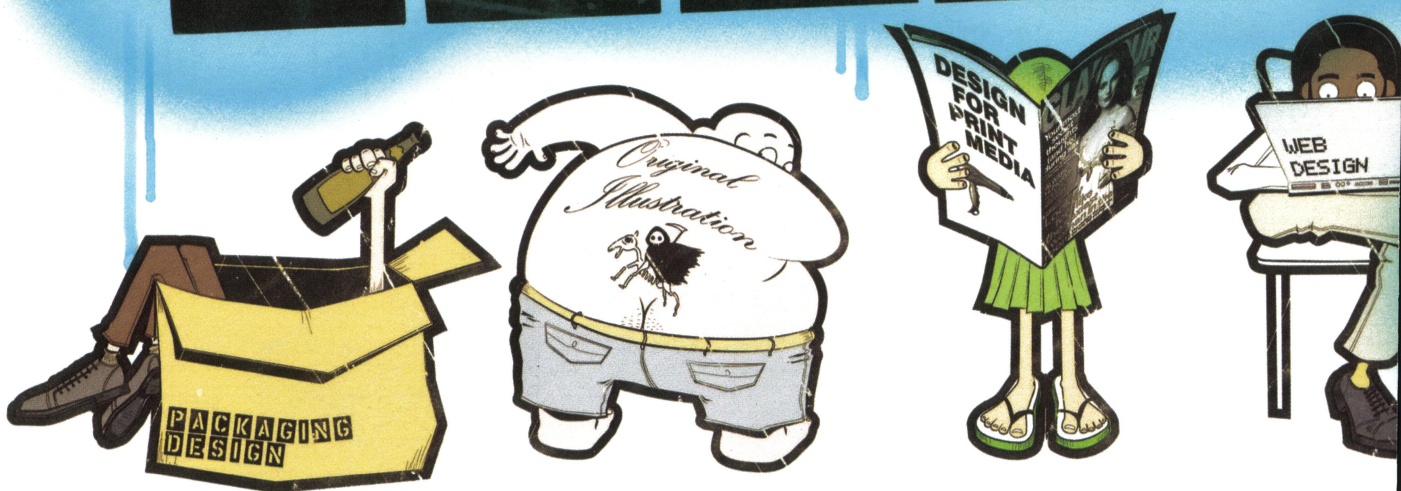
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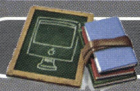
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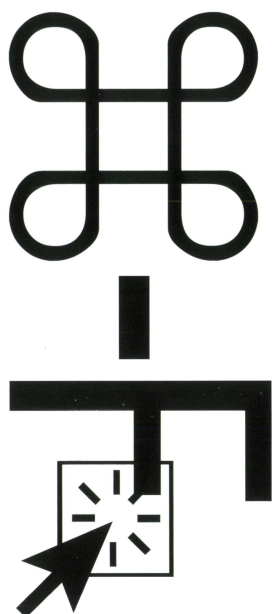
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### The Mac mini: take 2

By Various authors

The Intel transition rolls on relentlessly with the release of Core Duo- and Core Solo-based Mac minis. We literally dissect the new machines, to tell you what you need to know.

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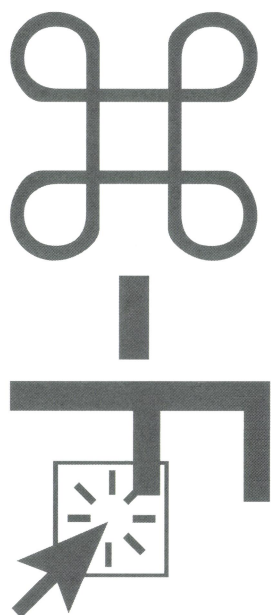
Create a podcast in GarageBand 3

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No iSync support?  
No worries.





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Another Apple event, another Intel-based Mac, and more software to run on it. As Apple enters its fourth decade in business, what may be its riskiest transformation yet is in full swing.

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## Test drive.

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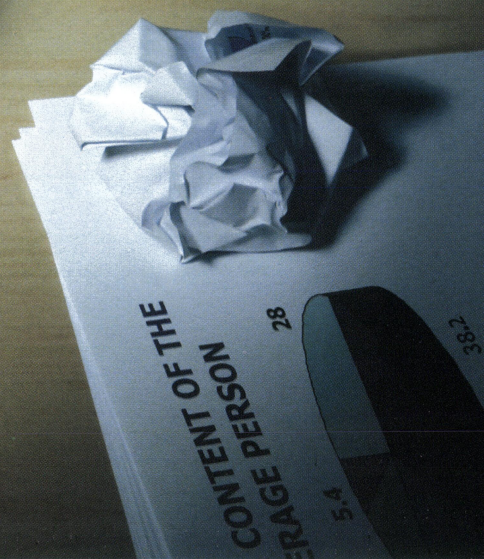
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From the Macintosh scene to the magazine.

By Matthew JC. Powell.



## Hot Links

[www.macfixit.com/article.php?story=20060308081610672](http://www.macfixit.com/article.php?story=20060308081610672)

Couldn't have said it better, so I won't

# Be afraid (but not very afraid)

**M**UCH fuss and bother was made in recent weeks by a story that appeared on an Australian technology new web site claiming that Mac OS X could be “hacked in under 30 minutes”. No, I’m not going to give you a link to it, but Google ought to be able to help you out.

So sensational was this story — exposing major flaws in Apple’s so-called secure OS — that it spread like wildfire even to international new sources. I have to admit I was alarmed myself, but not for the reason you might think. More on that in a second.

The story essentially recounted a “hacking challenge” in which users were invited to deface a web page hosted on a Mac if they could. The challenge was over in under six hours, as a contestant managed to give himself administrative privileges and deface the web site, pouring scorn on Apple’s much-vaunted security.

That would be a serious blow to the reputation of OS X and the sense of trust we users have in our machines. If it were true.

What the story failed to mention is that the person who hosted the challenge gave users a head-start by setting up a mechanism by which they could create local user accounts for themselves remotely. This means that the mini was not “hacked” from the outside, but was breached by an authorised user.

No system admin — or even normal user — in their right mind would set up a Mac that way. It made a mockery of the “challenge”. What alarmed me was that the story — from a usually reputable source — didn’t mention this fact. Even later, when the story was updated with more accurate information, it wasn’t made clear what the implications of letting people set up user accounts remotely were — it still sounded like the machine had been broken from the outside, and the alarmist headline remained.

The “hacker” involved, who called himself “Gwerdna” (I’m guessing he’s really called Andrew G and I’m most impressed with his cryptography skills), boasted that even if the machine had been properly secure, he’d still have been able to crack it. We’ll never know.

In response to the “soft” hacking comp, a Mac enthusiast at the University of Wisconsin set up a similar challenge on his Mac mini, which had proper security settings (though nothing fancy). That challenge ended just before this issue went to press, and according to its administrator the machine was not breached despite thousands of attempts. Gwerdna, where were you? Gwerdna?

So does that mean we can all relax? Not for a second. Gwerdna (actually, I used to know an Andrew G ...) may not have really hacked that machine, but he did manage to escalate his privileges from a

normal user to root in order to deface that web page. That such a thing is possible is genuinely worrying and I hope Apple is taking a good look at what happened.

I was going, at this point, to list a few things you should be doing to strengthen the security on your own systems, just to restore your peace of mind. However, as I sat down to write, I was sent a link to an article on MacFixIt (see “Hot links”) that says almost everything I was going to say. Indeed, if you read the user comments, it even says the one extra thing I’d have added: the best security in the world is no substitute for a reliable backup strategy, so get yourself one right now.

That’s about all I have on that. ☒

## More on names

Some of you may have noticed (and most of you probably haven’t) that I’ve been running a little guerrilla campaign in these pages aimed at getting Microsoft in trouble. It all comes down to a custom application and services company called Vista, based in Washington just down the road from Microsoft. John Wall, Vista’s chief executive, is on the record as saying that Vista won’t challenge Microsoft for violating its trademark, as long as people call the new version of its OS “Windows Vista”. He’ll have a problem, he says, if it ends up being generically referred to as “Vista”.

Accordingly, whenever you read about Microsoft’s new creation in *AMW*, it will be plain old “Vista”. Just for a bit of mischief.

But I don’t want to be seen as partisan. Oh no, far from it.

As you may also have noticed, I’m not too impressed with the new name Apple has applied to its Intel-based notebook line. I’ve also taken issue with the use of the word “Pro” and speculated broadly as to what the non-Pro version of the machine might be called.

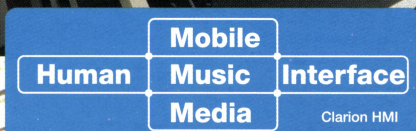
So I have an idea. Once the “consumer” version of the MacBook is announced, I’m going to start calling it “Little MacBook”. The “professional” version, from then on, will be “Big MacBook”.

I wonder if that will make anyone mad?

*Matthew J.C. Powell*



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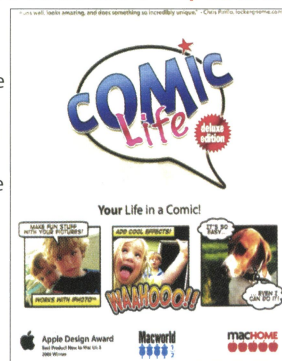
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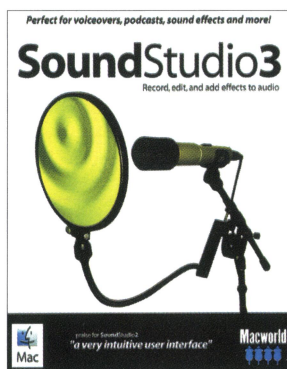
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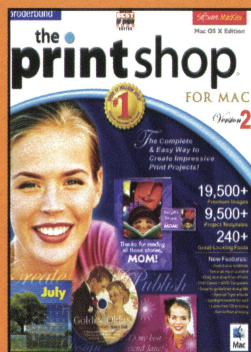
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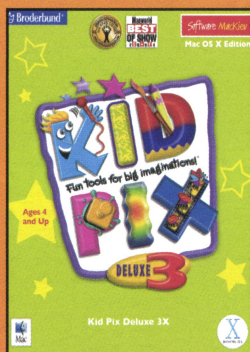
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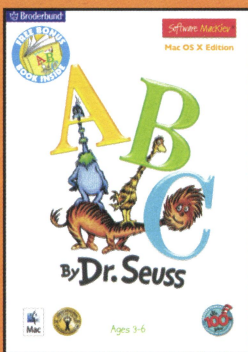
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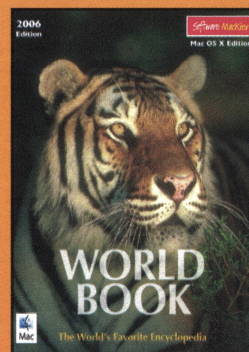
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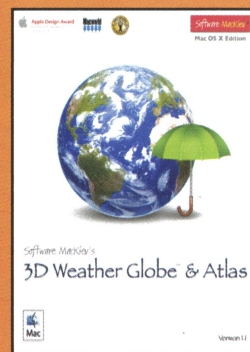
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### On Tour letter of the month.

For the next issue, Conexus (02 9975 2799) will be giving a JBL On Tour Portable Music Box valued at \$194.95 to the Australian Macworld reader who sends in what we deem to be the most interesting letter.

On Tour is a compact, lightweight, high performance sound system, and connected to your iPod, iPod mini, MP3 player or other music source, will provide hours of clean, powerful sound. The stereo mini jack connection allows you to enjoy high quality audio from a variety of portable devices including laptops as well as CD players and desktop computers. On Tour comes with slick touch pad controls for volume, and will remember your last volume setting after the system shuts down. The unit also features an integrated protective cover and stand, with the sliding cover serving as a stand when open. On Tour has a universal AC adapter for worldwide use and an audio input cable is included. Proprietary technology ensures the On Tour thumps out quality bass and clear accurate sound.

### Nokia help

Jeremy Smart could have a look at Datapilot (see "Hot links"). Datapilot supports the Nokia 3200 but unfortunately Susteen doesn't want to sell to anyone outside the US, UK or Canada. This seems to be because one of the touted features of the program is being able to connect to the internet by choosing your ISP from an inbuilt list — hardly a big issue.

I bought a USB cable for my Nokia 6225 (the only Nokia on Telstra's \$20 plan at the time and a CDMA phone and quite common in country areas) in the wan hope that I would be able to get the photos off the phone. No luck, but I accidentally discovered that my Mac saw the phone as a USB modem. After a fair bit of fiddling about I was able to connect to the internet, first via my ISP's usual dial up settings and then using Telstra's casual data access connections. The phone operates on the CDMA-1x network but I haven't been able to access the advertised broad band speeds — it seems to be more around the 14 kbps level.

It's frustrating that, first, Apple doesn't document this sort of capability and, second, Apple seems to have lost interest in iSync — that list of supported phones hardly seems to have grown since iSync was introduced.

Ed Jensen.  
Inverloch Victoria

Letters should be e-mailed to [matthew.powell@niche.com.au](mailto:matthew.powell@niche.com.au) with a subject header of "Mailbox" or by post to Australian Macworld Mailbox, 3/165 Fitzroy Street, St Kilda, Victoria 3182. Letters of fewer than 200 words are given preference. We reserve the right to edit letters and probably will. To be eligible for the On Tour prize, you must include your full name and address, including state or territory.

*I have a theory that Apple is secretly planning to phase out iSync in favour of moving its functionality into the increasingly-inaccurately-named iTunes (or some putative future version of the software, maybe even with a sensible name). Meanwhile, thanks for the tips.*  
— M.J.C.P.

### Locked in?

In your review of VoIP hardware (AMW lab, 03.2006), you looked at the Belkin broadband modem/router (F1PI241EGau) being supplied in Australia through iiNet. In the summary chart at the top of page 73, in the Cons column, is written "Locked to iiNet".

Is this information correct? I specifically asked this question when signing up to iiNet and was specifically told "No, iiNet doesn't believe in that". I've been using the device very happily for the last six months, but will not be satisfied if I was lied to.

Brendan Abrams  
Maylands, WA

*Ian says this was basically poor wording. No, you aren't "locked" to iiNet once you've bought the device, but iiNet is the only place you can buy it in Australia so you're stuck with one supplier, even though you can hook it up to whatever network you like after sale. Apologies for the confusion.* — M.J.C.P.

### iPod catastrophe

I generally champion all things Apple. Over the years I've steadily built an air of cyber invincibility that I believed Macs provided me with. I purchased a shiny new 40GB iPod. I listened to it every day, boasted how fantastic it was, and frowned upon those who didn't share my enthusiasm.

Then it happened — 13 months later it wouldn't start up. This couldn't happen. Surely there must be an explanation? So I went in search of answers at the Apple service centre: what would it cost to fix? \$100? \$200?

The consultant confirmed my worst fears — "hard drive failure, it'll cost as much as a new iPod to fix". Great, not only have I purchased a device which has failed me, but there is no real option when it breaks.

What will I do next? I'm open to suggestions, but I will probably buy another iPod. Why? Because I don't believe I can go without one now. Sure, I could go a week or two, but in the long run I would be pining for one again.

Simon Perrin  
Via internet

*I can't say I get a lot of letters like this, but I do get a steady stream — maybe one every couple of months. It's enough to make me think that Apple needs to rethink its design strategy with iPod — stop trying to be smaller and sleeker all the time, and go for something ever so slightly more serviceable. It would still be a great product, but it wouldn't die at the first fault.* — M.J.C.P.



### Hot Links

[www.susteen.com](http://www.susteen.com)

Possible saviour for Nokia 3200 users

**Terms and Conditions.** Mentor letter of the month: 1. Instructions on how to enter form part of these conditions of entry. 2. To enter send tips or queries to [matthew.powell@niche.com.au](mailto:matthew.powell@niche.com.au) with a subject header of "Mailbox". Entries will be judged by the editorial staff of Australian Macworld. The judges' decision in relation to any aspect of the competition is final and binding on every person who enters. No correspondence will be entered into. Chance plays no part in determining the winner(s). Each entry will be individually judged based on its degree of interest. 4. Employees, their immediate families and agencies associated with this competition are not permitted to enter. 5. The Promoter accepts no responsibility for late or misdirected entries. 6. The best entry/entries as determined by the judges will win the prize(s). 7. The Promoter is neither responsible nor liable for any change in the value of the prize occurring between the publish date and the date the prize(s) is claimed. 8. The prize(s) is not transferable and will not be exchanged for cash. 9. The winner(s) will be notified by mail. 10. All entries become the property of the Promoter. 11. The collection, use and disclosure of personal information provided in connection with this competition is governed by the Privacy Notice 12. The Promoter is Niche Media Pty Ltd of Level 3 / 165 Fitzroy Street ST KILDA VIC 3182 Ph 03 9525 5566, (ABN 13 064 613 529).



## Wish list

So what are these rumours about Apple making a PDA?

We all want it: the all-in-one: phone, computer, gaming device, camera, mp3 player, media centre — it's a dream machine!

Apple should make this — that company can do everything. Apple already has most of the mp3 market, they should upgrade and widen their product range to overpower Microsoft-based PocketPCs.

Apple is in a competition versus the PSP. I hear that Sony is going to upgrade it to have a camera and a hard drive. That will shut down the iPod. That's where Apple retaliates by making a PDA.

Make rumours the truth, so I don't go and buy an iPod video and instead save my money for the Apple PDA.

**Julian Wood**  
Via internet

*Interesting thought, Julian, but I would dispute your claim that Apple can do "everything". Part of what got it in trouble in the 1990s was trying to do everything, and discovering that in fact no company is all-*

*powerful. I also suspect that a hard-drive equipped PSP wouldn't be enough to knock the iPod off its perch. But I won't say Apple won't produce a PDA, any more than I'd be game enough to say it will. I've grown wary of surprises. How about this: while the company is focussed on the Intel transition it is very unlikely to launch a new product line. So if you want an iPod with video, go buy one and you'll still have time to save up for the PDA if it ever comes. — M.JC.P.*

## Timely warning

I am writing this letter on a Windows PC following the catastrophic loss of the hard drive on my iMac G4. The loss of data was total — a very surprising event in the life of a Mac user. There is no explanation: all the power supplies were surge protected and any virus would have had a firewall and regular check to get through. Not since the home aquarium poured down the back of my Classic II in the early nineties has such a tragedy occurred. The aquarium story though had a

good end — it dried out and started up first time.

This letter is not a whinge because Macs have fallen from favour, but to remind other readers that backing up of data is a necessity not a luxury. I have a number of backup CDs and DVDs of some of the data but e-mail addresses are gone and I am reliant on friends contacting me to re-establish links. I have used this event as an excuse to upgrade — my son will now get the G4 for his University studies along with a new external hard drive as a backup. I am investing in a new iMac PowerPC G5 and will also have an external hard drive to mirror all my data. The cost of the backup or subscription to .Mac is not as bad as the loss of the data and cost of repairs.

**Sean O'Malley**  
Melbourne, Vic.

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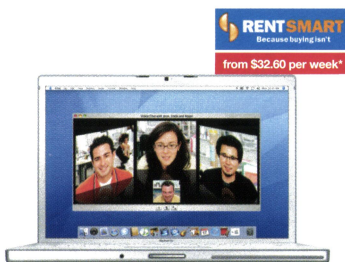


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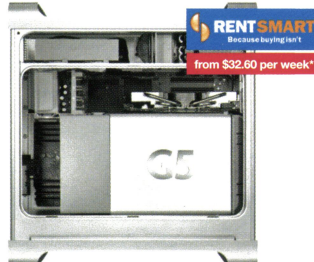
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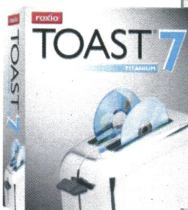


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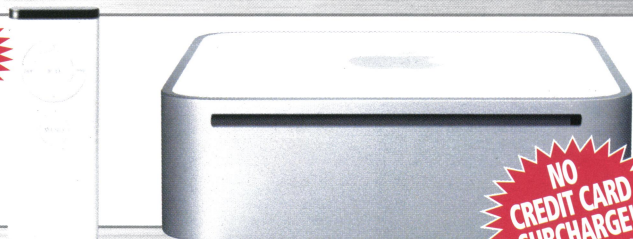
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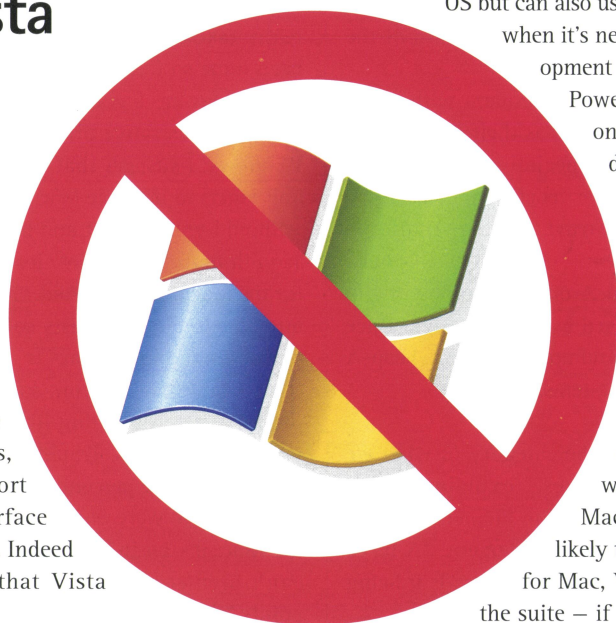


**Hot Links**

[www.intel.com/idf/us/spring2005/systems/index.htm](http://www.intel.com/idf/us/spring2005/systems/index.htm)  
The Intel Developer Forum — all of a sudden it's relevant

## Microsoft: Vista won't boot on Macs

At the Intel Developer Forum in San Francisco, officials from Microsoft chose one of the very last sessions — reportedly after most conference attendees had gone home — to reveal that the upcoming version of Windows, known as Vista, will not support Intel's Extensible Firmware Interface (EFI), as had been widely expected. Indeed Microsoft had previously said that Vista would support EFI.



Lack of support for EFI is primarily what stops current versions of Windows XP from booting on Intel-based Macs. The Intel version of Mac OS X supports booting via EFI, and the Apple-built Intel hardware only boots with EFI.

According to a report in *APC* online, Microsoft's turnaround scotches the hopes of many users who were hoping to "dual-boot" their machines with both OS X and Vista much the same way as some Mac users continue to boot into OS 9 occasionally (to me, running Windows on a Mac sounds much like buying a Ferrari, ripping out the engine and dragging it behind a donkey, but to each their own). It will also come as a disappointment to Intel, which had been hoping to move all of its hardware to EFI. Very few PC manufacturers support the new system, instead retaining support for the PC BIOS that has powered Intel-based computers since the 1980s.

Microsoft said that it couldn't justify moving to support EFI when so few manufacturers are using it. The reasoning looks a little circular, when you consider that few manufacturers will want to move to EFI when there is no version of Windows that will use it. Thus the pace of innovation in the Wintel market.

**Someday, someday.** Of course, all hope is not lost. Microsoft did say that the server version of Vista, generally aimed at machines with 64-bit processors, will support EFI. And it said that a future version of Vista would eventually support EFI when the market was there for it. This putative future version would only run on 64-bit processors, though, so purchasers of current 32-bit Intel Macs will always be locked out.

Of course, you may have read about some clever users "hacking" Windows XP so that it will boot on Intel Macs. No doubt similar clever people will also be able to force their Intel Macs to boot Vista. Such a setup is neither endorsed nor supported by either Microsoft or Apple, so if you choose to be clever about it, you do so at your own risk.

For the rest of us, the dream of a single box that can run a proper OS but can also use Windows for the occasional moments when it's necessary resides with Microsoft's development of Virtual PC for Intel-based Macs. The PowerPC version of VPC7 relies too heavily on the PowerPC hardware, and therefore does not run useably under Apple's Rosetta translation environment.

Microsoft made a public pledge to develop Intel versions of Office for Mac for the next five years at the Macworld Expo in January, but didn't say anything specifically about Virtual PC. Rumour sites have suggested that because of the degree of re-engineering involved Microsoft won't be able to release a VPC for Intel Macs until mid-2007. It certainly seems likely that, as with the 2004 release of Office for Mac, Virtual PC will lag behind the rest of the suite — if it is included at all. ☹



## ■ ANALYSIS



## Hot Links

[www.apple.com/support/downloads/](http://www.apple.com/support/downloads/)  
Make sure you've got the latest security updates

## Mac OS X malware merits education and caution

**L**EAP-A. Inqtana-A. Safari preference flaw. That "hacked in 30 minutes" thing. It's been a tough month for stalwart Mac supporters who crow about the platform's security compared to Windows. While the Mac remains a very secure and stable platform, these issues demonstrate the need for increased user awareness, education and protection, according to several security analysts we contacted. The motivation behind these recent security incidents is money, some said.

"This is all tied to the issue of cybercrime for profit," said Stacey Quandt, research director for technology-research firm Aberdeen Group. "We're seeing cybercrime as the driver, and I think that no platform is safe from that."

Online criminals, Quandt contends, are only too happy to exploit any vulnerability they can find in order to gain access to information that they can use to turn a profit. "Organisations have firewalls and corporate anti-virus software already in place," Quandt said, "but consumers may not have the necessary protection. Cybercriminals will try to exploit the weakest link in the chain."

To that end, it's wise to add anti-virus software, she added. "Consumers need to take some protection and be aware of the risks," Quandt added.

Mac OS X has been a relatively safe environment with many users who aren't as inured to security issues as their PC counterparts. As a result, Mac users may be especially susceptible to malware that depends on what's known as "social engineering" — that is, taking advantage of a user's trust — rather than any specific exploits in the operating system.

That's what happened with the Leap-A malware, a potentially malicious program that comes disguised as an image file. Once users expand the compressed archive and double-click it, Leap-A launches and installs itself on users' systems.

**Education is key.** "This falls into the category of what we call 'user education and awareness issues,'" explained Scott Carpenter, director of security labs for Secure Elements, a firm specialising in enterprise vulnerability management. "A large factor of this is the growing marketshare for the Mac. Is it being targeted? Yes," he said.

Carpenter agrees with Quandt's assessment that the ultimate driver for this is cybercrime — criminals attempting to exploit security flaws or user naivety in order to gain access to personal information that they can then sell or use to their own ends.

Carpenter said that recent examples of Mac OS X exploits are "only the tip of the iceberg." Carpenter recognises that Apple will probably release a patch to fix the recently documented problem with Safari in which a preference setting can lead to the execution of a malicious shell script [note: the fix was released a few days before this went to press — M.J.C.P.]. But he said that users can do more to protect themselves.

"You need to have tools on your system that protect against viruses, you need to have updated patches for the system and you need user education. When you have all three, you'll be able to cut back on the problems," Carpenter said.

"The worst mistake Macintosh users could make would be to become complacent in their security practices deluding themselves into thinking that the Mac OS has no vulnerabilities. It does," said Neil MacDonald, vice president and distinguished analyst for information security, privacy and risk at Gartner Research, a company whose client list includes anti-virus software makers. "More will be found and more exploits will appear."

"Best practices for patching should apply on the Mac as surely as on any Windows machine. The same is true for personal firewall and antivirus software configuration. E-mail and web traffic needs to be filtered for malicious attachments and end-users need to be trained not to download and install unknown software from unknown sources," MacDonald said.



**Dancing in the aisles.** Andrew Jaquith, senior analyst for the Yankee Group, has a decidedly different perspective. "I don't know

if this is the shape of things to come or not. I'm sure the anti-virus industry is dancing in the aisles about this, but it doesn't really take a hell of a lot of ingenuity to come up with what's been done so far," Jaquith said.

"The Mac has a good security model — you don't have the wide open administrative privileges turn on by default like you do on Windows. I suspect that these recent exploits will cause Apple and others to improve Mac OS X security even further," he added.

Should you run out and buy anti-virus software for the Mac? Jaquith thinks not. "There just aren't that many pieces of malware for the Macintosh," he said. "If anything, you'll probably see more attempts to target security software in the future, rather than the actual operating system."

It's simple maths from Jaquith's perspective. "The Windows platform has something like 150,000 documented examples of malware — viruses, Trojan horses, worms and so on. Presuming the Mac has five percent of the market, you'd expect to see about 7500 if there were equivalent security problems. It's so rare on the Mac, it's an infinitesimally smaller sample size. You simply can't predict a trend based on that small a number of data points," Jaquith said. • Peter Cohen



## ■ BRIEFS



## Hot Links

[downloads.bigpondmovies.com/home.do](http://downloads.bigpondmovies.com/home.do)  
Telstra's movie downloads site — no Macs allowed  
[www.stmbags.com.au](http://www.stmbags.com.au)  
The Charlize look

## The non-release release

**T**ELSTRA announced its BigPond Movies Downloads service in late February — a service which allows users to download new release and classic movies to their computers for a nominal fee and watch them for a limited time, all without the hassle of getting DVDs and needing to return them.

All you need is a broadband internet connection (preferably a really fast one) and a Windows computer. Why's that? Because the movies are encoded using Microsoft's Digital Rights Management (DRM) system, which requires Windows Media Player 10 to play back. Microsoft has stopped development of the Mac version of Windows Media Player at version 9, which doesn't play back DRM-encoded files.

A spokesperson for BigPond said that the service would support Mac users "when Microsoft updates its software". It's unclear whether or not she knew that Microsoft had already said it would do no such thing.

Anyway, shortly after the launch we at AMW received a big yellow envelope containing a cardboard folder with "BigPond Movies Downloads" emblazoned on the front — and containing absolutely nothing. We're guessing it's a press release about the part of the service that works on a Mac. — *Matthew JC. Powell*

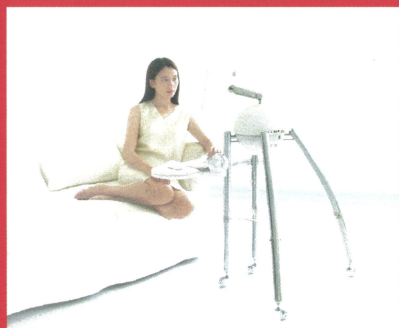
## Thank the Academy

**H**OW would you like to carry your iPod around in the same iPod case Charlize Theron uses? Well, you can — sort of. Australian manufacturer Standard Technical Merchandise (STM) was invited to supply 360 of its iPod Cocoon cases — valued at \$A50 each — for inclusion in the bags of goodies handed out to Oscar nominees and presenters. The cases supplied by STM had to be specially modified, though, to accommodate iPod nanos. So if you want to achieve the same effect you might need to stuff yours with a bit of tissue paper — but that's nothing new if you want to achieve the Hollywood starlet look, right? — *Matthew JC. Powell*

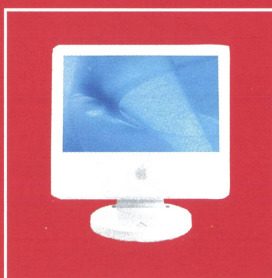


## The Perfect Partners for Your Mac

Introducing the stylish accessories for your Mac from Raindesign, now available at Infinite Systems.

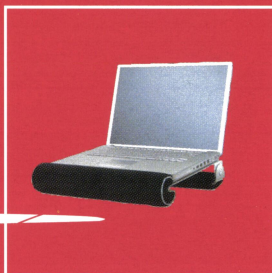


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## ■ MUSIC



## Hot Links

[www.apple.com/au/logic](http://www.apple.com/au/logic)

Apple's Logic Pro 7, now with Intel support

[www.ultrasone.com](http://www.ultrasone.com)

Click on "Where to Buy" for local availability

[www.cortex-pro.com](http://www.cortex-pro.com)

DJ stuff

## Apple shines at NAMM

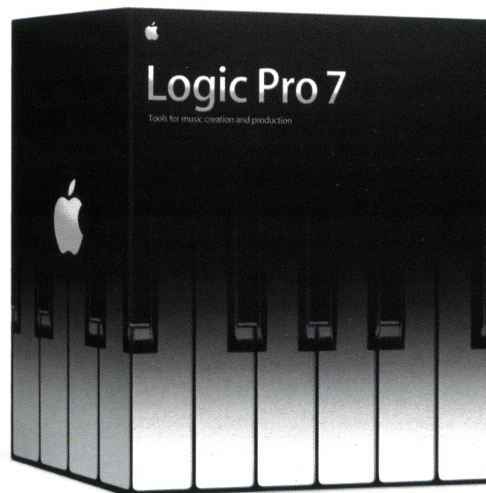
**F**OR me, the week after Macworld Expo is a time to check out the latest products in the music world, at the North American Music Merchants (NAMM) trade show in Anaheim, California.

Apple showed off an update to Logic Pro, its pro-level audio app. The 7.2 update adds Intel compatibility and includes integrated support for the new Apogee Ensemble interface, Digidesign Pro Tools HD 7 DAE, and Serato Pitch 'n Time; improved support for Rewire and control surfaces; and 32-channel support for multi-channel Audio Units instruments.

Logic Pro 7.2 can play back compressed GarageBand 3 files, and it includes ducking and speech-enhancement plug-ins, as well as the same jingles and sound effects found in GarageBand. The update from Logic Pro 7.1 — which Apple is calling a "cross-grade" because of its Intel support — costs \$75.

Ultrasone showed its iCans, a white and silver open-style headphone set. The \$227 iCans use the company's patented S-Logic Surround Sound audio technology, which directs the audio signal to the back of the ear (reducing the pressure on your eardrum).

And Cortex, a new company, made its mark at NAMM by announcing several high-end products for DJs who use iPods (or any USB storage device) to store and play music. The company demonstrated the HDC-01 and HDC-02 (no prices announced) with an iPod nano. The devices work with several audio formats and include front and rear USB ports, as well as advanced controls such as pitch and beat matching. • *Jim Dalrymple*



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## ■ USERS AND GROUPS

# User group events listing

To have your MUG Event listed here, please e-mail  
matthew.powell@niche.com.au

- Sat 1: **AUSOM Incorporated**  
Thirty Apple Years – A Celebration... Through Their Advertisements!  
[www.nicholaspyers.com/thirtyappleyears/](http://www.nicholaspyers.com/thirtyappleyears/)
- Mon 3: **North Queensland Macintosh Users Group**  
Securing Your Mac  
[www.nqmug.org](http://www.nqmug.org)  
**Gold Coast Macintosh User Group**  
Check web site for topic  
[www.goldcoastmacusers.org.au](http://www.goldcoastmacusers.org.au)  
**AMUG Sydney**  
A Look at iLife '06 & iWork '06  
[homepage.mac.com/sydamug/content\\_meetings.html](http://homepage.mac.com/sydamug/content_meetings.html)
- Tue 4: **MacTalk – Hunter Macintosh Users Group**  
Broadband Options  
[groups.yahoo.com/group/MacTalk/](http://groups.yahoo.com/group/MacTalk/)  
**WAMUG**  
Check web site for topic  
[www.wamug.org.au](http://www.wamug.org.au)
- Wed 5: **Toowoomba Apple and Macintosh User Group Inc.**  
Fonts – Generation, Management & Application  
[www.taamug.org.au](http://www.taamug.org.au)  
**Club Mac**  
Q&A Session  
[www.clubmac.org.au](http://www.clubmac.org.au)  
**Coffs Harbour Apple Macintosh Users Group**  
Introducing iWork '06  
[groups.yahoo.com/group/coffs\\_mac\\_users](http://groups.yahoo.com/group/coffs_mac_users)
- Fri 7: **SAAUC**  
Welcome to Macintosh; Mac OS X; Graphics; Games; Communications & Troubleshooting  
[www.saauc.org.au/nextmeet.html](http://www.saauc.org.au/nextmeet.html)
- Sat 8: **AMUG Sydney**  
1-on-1 friendly tuition on your laptop or the University's eMacs  
[homepage.mac.com/sydamug/content\\_meetings.html](http://homepage.mac.com/sydamug/content_meetings.html)
- Sun 9: **Gold Coast Apple Users Group**  
Looking at the new Intel iBook  
[home.worldlink.com.au/appleserv/GCUsers.html](http://home.worldlink.com.au/appleserv/GCUsers.html)
- Mon 10: **MUGSUNCO**  
Check web site for topic  
[www.mugsunco.org.au](http://www.mugsunco.org.au)
- Tue 11: **ACT Apple User Group**  
Check web site for topic  
[www.actapple.org.au/Pages/Meetings/Meetings.html](http://www.actapple.org.au/Pages/Meetings/Meetings.html)  
**Macintosh Multimedia Group**  
DVD Conversion  
[www.nicholaspyers.com/presentations/20060411-dvdconversion](http://www.nicholaspyers.com/presentations/20060411-dvdconversion)
- Wed 12: **Retirees & Others**  
Intel – Wait or Upgrade Now?  
[www.nicholaspyers.com/presentations/20060412-intel](http://www.nicholaspyers.com/presentations/20060412-intel)
- Sun 16: **Apple-Q Inc**  
General Meeting, Presentation & Training  
[www.apple-q.org.au/meeting.php](http://www.apple-q.org.au/meeting.php)
- Wed 19: **Sydney Mac Users Group (SMUG)**  
Networking 101 + Securing Your Network from Hackers  
[www.sydney.macusersgroup.org](http://www.sydney.macusersgroup.org)
- Sat 22: **Geraldton Mac User Group**  
Check web site for topic  
[gmug.wamug.org.au](http://gmug.wamug.org.au)
- Mon 24: **iMUG**  
Creating Your Own Web Site & Introduction to FileMaker 8  
[www.imug.com.au/meetingNotes](http://www.imug.com.au/meetingNotes)
- Tues 25: **ACT Apple User Group**  
Q&A with "personal attention"  
[www.actapple.org.au/Pages/Meetings/Meetings.html](http://www.actapple.org.au/Pages/Meetings/Meetings.html)
- Wed 26: **BEAUT – Bendigo Education Apple Users Team**  
Garageband & Podcasting  
[www.beaut.org.au](http://www.beaut.org.au)
- Thu 27: **Central Victorian Macintosh Users (CVMU)**  
Using Templates & Style Sheets  
[www.cvmu.net](http://www.cvmu.net)



### External Drives



### Flash/Promotional Drives



### Memory



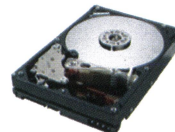
### Portable Drives



### Digital Cameras



### Hard Drives



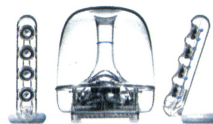
### Software



### Printers



### Sound



### Displays



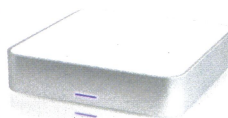
### DVD Burners



### eyetv



### Mac Mini External Hard Drive



### MacBook Pro



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## ■ TRANSITION



## Hot Links

[www.macworld.com/topics/software/universal/index.php](http://www.macworld.com/topics/software/universal/index.php)  
Macworld's page tracking the progress of key Mac apps for Intel

## Building Intel apps

**I**N June 2005, Steve Jobs stood before a crowd of people and announced that Apple was moving away from PowerPC chips – which had powered every Mac model for years – and moving toward Intel processors. It was a big deal, and the fact that he gave the speech at Apple's Worldwide Developers Conference, in front of the very people who write the programs that make the Mac what it is, was no accident. Developers would need to invest some time and effort in making Universal binaries (Apple's name for applications that run natively on both Intel and PowerPC Macs) for the latest Mac transition.

By making his announcement when he did, Jobs was giving developers a head start – he promised that the first Intel Macs would be out by June 2006, and most of us took that to mean we'd see nothing before then. To help developers with their work, Apple offered to rent them a Developer Transition Kit – a Pentium-based Mac system on which to test – for \$US1000, with the understanding that the developers would return the computer when Apple released Intel models (Apple has since improved on those terms, replacing the test models with new Intel-based iMacs).

So how is the transition going? The iMac Core Duo – the first Mac to run on a processor from Intel – was announced and released during January's Macworld Conference & Expo, a full six months ahead of schedule. As of this writing, there are over 600 native applications available for the new Intel-based Macs. (To check the status of some important applications, see "Hot links.") That number will surely grow in the coming months: some developers were waiting for Intel-based Macs to ship so that they could perform their final compatibility tests. "For [disk-cloning tool] SuperDuper, we thought it absolutely critical to test on real, production hardware, rather than a transition machine," says Dave Nanian, president of software development company Shirt Pocket.

Having apps that run natively on both Intel processors and PowerPC chips is critical if programs are to see any gains from Intel's Core Duo architecture. Non-native versions of applications have to use a dynamic code-translation technology called Rosetta; programs that rely on Rosetta will run on Intel machines, but in many cases they'll perform noticeably slower than they would on PowerPC machines.

**Behind the transition.** Many of the developers who've already released Universal applications are reaping the benefits of heeding Steve Jobs's advice. Last summer, when outlining the plan to move

to Intel processors, Jobs urged the developers who hadn't adopted Apple's Xcode programming tools to do so. This, said Jobs, would ensure a smooth transition to making a Universal application.

Rich Siegel, president and CEO of Bare Bones Software, switched to Xcode several years ago for his company's BBEdit software, and found it very helpful when preparing a Universal version of BBEdit, which was released in January. "I have to say, with all the transitions we've been through, this has been the easiest," says Siegel. "It was about what we expected."

Many developers who ported OS 9 applications to OS X, however, have yet to switch to Xcode – which, agrees Shirt Pocket's Nanian, makes the biggest difference for developers bringing their applications to Intel-based Macs. Xcode can create Universal binaries, whereas an application such as Metrowerks' popular CodeWarrior can't.

Another glitch that developers could face involves legacy code itself. Although classic Mac OS apps have already had to be altered to run natively on OS X, some of that remaining old code can get in the way of a smooth transition to a Universal app. So more work needs to be done before some developers can get Universal

applications out the door.

"We had to start from scratch," says Jerry Halls, a cofounder of Chronos, maker of note-management software StickyBrain. "We basically took 12 years of code and threw it away ... in order to move forward with the applications."

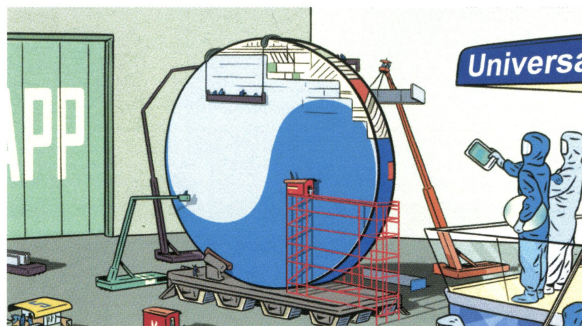
Fortunately for Apple, major Mac developers seem to be embracing the switch to Intel as readily as

small to midsize developers are. Roz Ho, general manager of Microsoft's Macintosh Business Unit, says that the software giant has been working with Apple for some time to create future versions of Office, using Apple's Xcode tools. At Macworld Expo, she announced a five-year agreement with Apple that includes a commitment to producing a Universal version of the Office productivity suite. Adobe has pledged its support, and company president Bruce Chizen joined Jobs onstage during the original Intel announcement to reaffirm Adobe's commitment to the platform.

**More than just software.** Remembering the transition from OS 9 to OS X, Mac users may doubt promises of an easy and quick transition. The initial move to OS X left early adopters without the ability to perform basic functions, such as burning CDs or even printing, but it doesn't appear as though developers are having as much difficulty this time around when it comes to drivers (the code that lets your Mac interact with hardware).

"HP is ready," says Rick Spillers, product marketing manager for Hewlett-Packard's Mac-connect program. "We have released full HP support as of Mac OS X 10.4.4. [Our printer drivers] are Universal binaries and are part of the Macintosh operating system. HP's Mac customers will be able to plug in their existing printer, and it will just work."

Other developers, such as audio-interface maker Mark of the Unicorn, have also released updated drivers, but much hardware still needs software tweaking. • *Jim Dalrymple*





By Dan Warne.

# Off the net

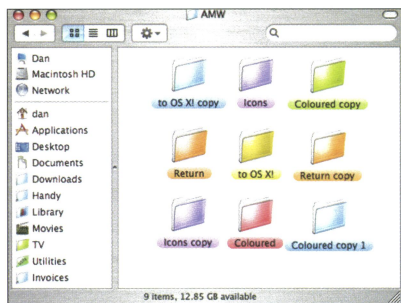
Latest shareware and free downloads



## Hot Links

[www.ausmac.net](http://www.ausmac.net)

Download the software



### ■ HeyFolders! 1.0 beta 2 Freeware X (10.3 or later)

Down with coloured labels! Bring back coloured folders to OS X!

### ■ Notlight 0.9 Freeware X (10.4 or later)

An improved interface for Tiger's Spotlight

search magnifying-glass menu. Allows use of AND NOT OR boolean operators, exact searching, and more explicit results that actually show file location etc.

### ■ Q 0.8.0.a537 Donationware X (10.3 or later)

Run Windows and Linux on your Mac free of charge using this open-source Cocoa version of the QEmu emulator. Looks and feels like Virtual PC — so much so that it's hard to believe this will last long without a legal threat. Grab it while you can.

### ■ Transmit 3.5 Shareware \$US29.95 X (10.3.9 or later)

A major update to the excellent FTP client. Includes droplets for drag-to-dock uploading of files to your web site. Also allows files on your FTP server to be edited in any application. Improved column view and more.

### ■ BelchX 1.2 Freeware X (10.2 or later)

Load this and your Mac (or your friend's Mac) will belch loudly every so often. Hmm...

### ■ Parsnips 1.5 \$US27 Shareware X (10.2 or later)

Store and organise any text-based information in an Apple-Mail-like interface with full-text search.

### ■ DashboardStarter 1.0 Freeware X (10.4 or later)

Starts and then immediately hides Dashboard. If you put this in your startup items you won't have to suffer the long delay as Dashboard retrieves the info for all your widgets the first time you look at it.

### ■ Desksade 2.0.2 \$US12.99 Shareware X (10.3 or later)

A utility that's unashamedly about making your desktop look nice. Fade out your desktop icons smoothly and then change your desktop picture on a rotating cube.

### ■ Compositor 2.8.0 \$US35 Shareware X (10.3 or later)

Image-editing program that has a lot of the power of Photoshop (and a very similar interface to boot) at a fraction of the cost.

### ■ Postcard Freeware X (10.2 or later)

Create e-mail postcards like Apple's iCards, but with your own photos, and many more options to customise the design of the card.

### ■ MailMergeApp 1.2 \$US10 Shareware X (10.2.5 or later)

Mail merges in Apple Mail. A simple application that does the job for honest small business types rather than catering to the identity-hiding needs of spammers.

### ■ CocoaBooklet 2.0.2 Freeware X (10.3.9 or later)

Make "booklets" out of PDF files generated from any OS X program. Shrinks and arranges pages in the correct order for double-sided printing and folding straight into booklets.

### ■ Airport Monitor Utility 1.1 \$US10 Shareware X (10.3 or later)

Keep an eye on what's happening on your Apple AirPort base station. Provides loads of useful info including signal strength of each connected wireless user.

### ■ Aion 1.7 Freeware X (10.3 or later)

Put world time zones in your menu bar in a drop-down. You can choose which time zones you want shown.

### ■ Betty's Beer Bar 1.3.23 \$US19.99 Shareware X (10.2 or later)

In this arcade game, you have to help sexy Barmaid Betty to achieve her island dreams by serving drinks to her barflies. Also from the same game makers: Wild West Wendy. Anyone get the impression they're aiming for a certain demographic?

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## Griffin Technology



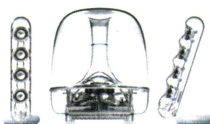
iTrip FM Transmitter  
for 3, 4G iPod and iPod Mini

## Monster Cable



iPod Charger

## Harman Kardon



SoundSticks II  
for iPods, MP3 Players  
and Computers

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The view from the other side of the counter.

By Fleur Doidge.

## Increasing entropy

**W**E are running out of excitement on this planet. I am not kidding. Everywhere you look, you see the commercialisation, commodification and -isation of everything exciting, and if they can't do that to it, why, they just make it illegal. And that's just in the Western world. Most of the planet could probably do with less excitement, but it's not the excitement that we, in our tawdry, square and privileged enclaves, feel really makes life worth living.

It seems that whatever you like, somewhere, somehow, someone is determined to spoil it for you. Just look at what's happened to travel. Once upon a time — not really that long ago — travel meant adventure and excitement, and really wild things, as Zaphod Beeblebrox might say. These days, even the guidebooks are boring. I mean, does anybody really bother to pay attention to *Lonely Planet* any more? Most if not all guidebooks — those one-time founts of travel inspiration and starry vision — do little more than supply information these days. Yawn.

Everyone has been everywhere, and everywhere you go you are guaranteed a fleabag hotel and a host of touts and some old tart flogging postcards and yet another with a passel of grubby-nosed kids wanting your money or your life. Everywhere, some clever marketroid has parcelled up all the "experiences" and distilled them into views and exotic bathrooms and cute albeit hairy monkeys swinging by their bananas and chained by the neck outside some golden temple or other. It's all become a blur.

And it's happening with technology too.

More mobile phones, more music players, more notebooks and PCs and tablets than anyone would ever want to shake a stylus at. Or bury underground, if it comes to that (and it has). We are all desperately seeking The Experience, that elusive feeling that will make our sorry lives worth living and many of us seek it in a sleek, stylish box stamped with the logo of Apple, or Samsung, or Toshiba. Still The Experience recedes, worse than a mirage in the Sahara, more annoying than the memory that slips away forever as you surface from a deep yet troubled sleep.

The more fanfare, the more hype, the more money thrown at a thing, the more unattainable and ephemeral the idea, the less you get in the end. I guess we should get used to it; we all end up in a coffin.



### Hot Links

[www.bbc.co.uk/cult/hitchhikers/](http://www.bbc.co.uk/cult/hitchhikers/)

A guide to the original Hitchhiker's Guide to the Galaxy BBC radio show and the cult surrounding same

[www.lonelyplanet.com/worldguide/](http://www.lonelyplanet.com/worldguide/)

Lonely Planet travel guides online

[www.amazon.com/gp/product/1861892179/ref=nosim/104-0719121-7137534?n=283155](http://www.amazon.com/gp/product/1861892179/ref=nosim/104-0719121-7137534?n=283155)

A Philosophy of Boredom, by philosopher Lars Svendsen

Meanwhile, as the hubbub about information technology continues to dissipate, resellers and retailers cling like shipwrecked sailors to any spar floating by in the current. Not towards land, mind.

Apple resellers have been clinging to Apple's brilliant marketing and sales strategies for a long time now, scared of drowning if they let go or fight against the current for more than a minute. But no business can rely solely on some other company to inspire. Apple — rightly — concentrates on its brand and products to the exclusion of its third-party resellers and retailers.

Similarly, resellers need to inspire customers on their own behalf. Customers — whether consumers, educational sector buyers or govern-

ment IT procurers — should be coming to the resellers and retailers because of the value those specific businesses deliver, not merely because they distribute iPods. Even a strong brand can fail — look what happened to Gowings in central Sydney earlier this year. Now, that was a shop with personality and brand and wads of interesting products in combinations you couldn't really find elsewhere — but it still collapsed eventually.

Gowings would have sold more stuff had it continued to inspire people. Most of the stuff we buy nowadays we do not need — we buy it only because we want it badly

enough, for whatever scarcely adequate reason. It is an emotional action.

Any company can suffer the fate of Gowings. Changes are afoot in our society that will go on making it harder to sell stuff of all kinds to people. For example, the population is ageing. There are fewer births, and fewer young people entering the workforce in any given year.

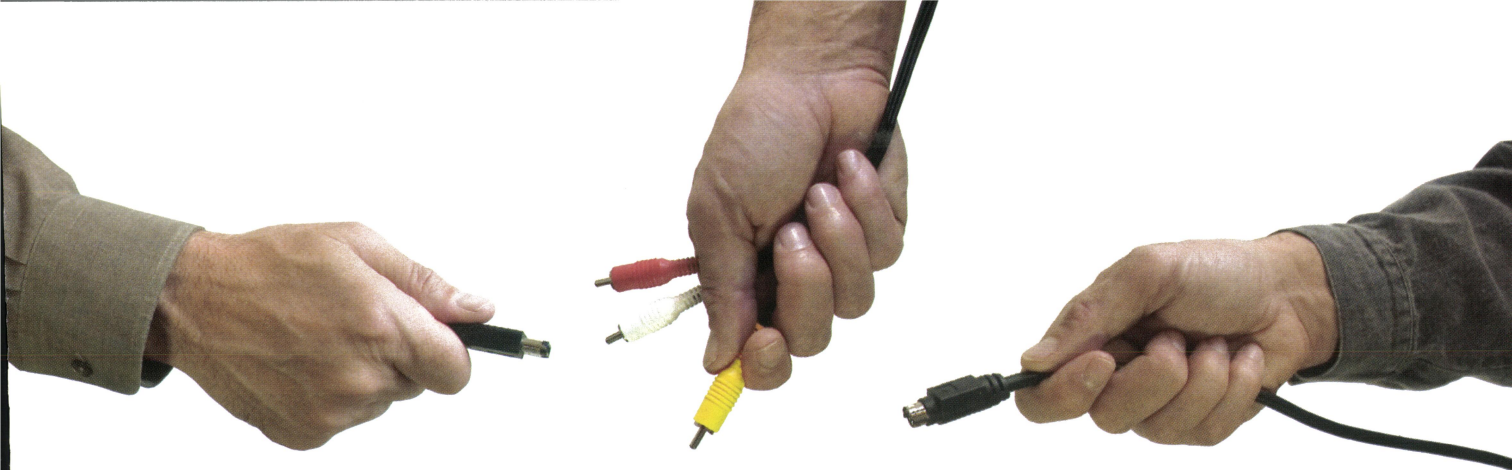
A thing about older people is it's harder to sell them technology for very good reason: they already figured out they didn't need the stuff. Having lived so long without X, Y or Z, they know they can live without them. They also have experienced what happens to stuff as the years pass. It gets obsolete, incompatible with newer technology and expensive if not downright difficult to dispose of.

So here's a hint for "forward-thinking" resellers and retailers: not only will you need more bizarre and aggressive marketing plans to inspire consumers, but you're going to have to ease those fears. Don't panic or anything. ☹

**Fleur Doidge is a longtime observer of the Mac reseller channel in Australia.**





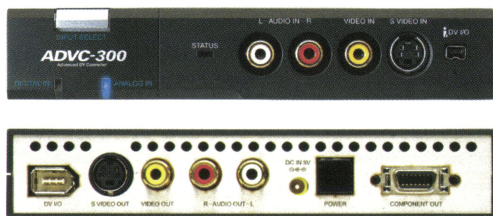


# We Know All the Ins and Outs

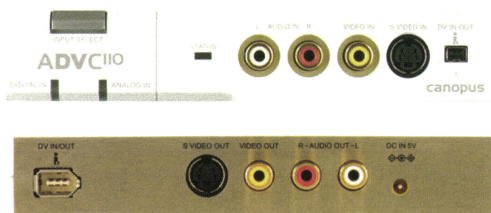
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# MAC MINI: TAKE 2

What's changed  
with the Intel mini —  
and how it affects you





**T**HE Mac mini joined the ranks of Intel-based Macs in March when Apple unveiled a revamped Mac mini product line. The Mac mini now comes in two configurations — a \$999 model with a 1.5GHz Intel Core Solo chip and a \$1299 version powered by a 1.67GHz Core Duo processor.

How do these two new minis compare to their predecessors? What other changes will you find under the hood? And does this update mark a step forward for the Mac mini? These questions and more are on the minds of every potential mini purchaser. Let's investigate ...

### **I've heard about the Core Duo — what's Core Solo?**

The Core Solo is essentially the same thing as the Core Duo processor, except — as the name implies — a Core Solo processor has only one processing unit (or "core") instead of two. Like the iMac Core Duo and the MacBook Pro, both Mac mini models enjoy a speedy 667MHz frontside bus (four times the speed as that of previous Mac mini) and 2MB of L2 cache (four times the amount as in the previous Mac mini).

**Is the RAM faster as well?** Yes. Again, like the iMac Core Duo and MacBook Pro before it, the new Mac mini uses 667MHz DDR2 SDRAM, rather than the previous model's 333MHz DDR SDRAM. And the new Mac mini can handle 2GB of SDRAM in its two memory slots — both the maximum RAM and the number of memory slots are double that of its predecessor.

### **But doesn't the new integrated graphics chip eat into that RAM?**

Yes, the new Mac mini uses the Intel Graphics Media Accelerator (GMA) 950 graphics processor, which doesn't have its own dedicated video memory — it shares its memory with the main system RAM. The GMA950 is allocated at least 64MB of memory, which is twice that included with the ATI Radeon 9200 in previous Mac minis, but Apple's specs say it requires 80MB (leaving 432MB available to the system).

On paper, the GMA950 is a better processor than the Radeon 9200. At the same time, the Mac mini still isn't a computer for gamers expecting high frames rates and fast redraws. It's the one area where the Mac mini will clearly lag behind the iMac Core Duo and MacBook Pro in terms of speed.

### **Is the Mac mini finally a home media computer?**

Pretty much, albeit at \$999, it's a somewhat pricey home-media-centre component. The mini gains the remote-control-and-software combo that make up Front Row, allowing you to control audio, video, and photos from across the room. And it uses a new version of the Front Row software that can play music, videos, and slideshows located on other computers on your local network. That means you won't even need to load up content on the mini to play it back.

The new mini models also have 5.1-channel digital audio output (instead of just stereo analogue output) for connecting to a surround sound speaker system for watching DVDs. There's also built-in digital and analogue audio input, something that the old Mac mini lacked entirely.

**It's a fair bit pricier, though, isn't it?** It's important to remember that the original Mac mini lacked all but the basic features, including the now-standard AirPort and Bluetooth wireless options. Adding those features to an older Mac mini would bring the price up to the level of the Intel model anyway. And that's not even considering the new chip and faster frontside bus and RAM; the switch to Serial ATA hard drives; and the addition of Gigabit Ethernet and two more USB 2.0 ports (now four in total). The \$1299 model costs more than its predecessor, but includes a Core Duo processor and 8x dual-layer DVD burner.

**What about a keyboard, mouse, and monitor?** Those will still cost you extra, but you can use almost any USB mouse and keyboard as well as analogue or digital monitor. In many cases, you can buy the input devices and display you need for a few hundred dollars.

**Let me guess — no modem?** Yep. As with the Intel iMac and MacBook Pro, Apple has removed the internal modem, but does sell a \$79 USB version for those who need one. ☹





## ON TEST: Intel Mac mini scores a mixed bag



WITH a choice between a 1.66GHz Intel Core Duo or 1.5GHz Core Solo processor, these new minis replace the current models built with either a 1.42GHz or 1.25GHz PowerPC G4 processor. Macworld Lab has put these two models to the test, and the results — including an updated version of our Speedmark benchmarking suite — are something of a mixed bag.

Like all of the new Intel-based Macs, these Mac minis perform admirably when running applications that have been updated to run on both Intel and PowerPC processors. Cinema 4D results, for example, show the Core Duo Mac mini rendering the test scene in one-third of the time it took the previous high-end mini.

Tasks performed using these Universal Binary applications make up the bulk of the new benchmark results, but as Speedmark is designed to compare how one Mac ranks among the rest of Apple's lineup in typical day-to-day operation, the current benchmark also includes a few tests using Microsoft's Office suite, which has not yet been updated.

These non-native applications require Rosetta, OS X's built-in code translation technology, to run on Intel Macs. Unfortunately, there is a hefty performance penalty associated with this translation. With that in mind, it's easy to understand

why the Intel minis outperformed their PowerPC counterparts in Speedmark, but not by the margin suggested in Apple's Mac mini marketing materials.

With two processing cores, the 1.66GHz Core Duo Mac mini performed much better than the single processor minis on Universal application tasks that take advantage of multiple processors, like Cinema 4D, iMovie, and iTunes. It even helped close the gap on Rosetta tests such as with the Photoshop suite. The Core Solo, the first Intel-based Mac with just one processing core, had a hard time keeping up with its core duo sibling, but did perform better than the previous low-end mini system in many of the native applications.

One change to the Mac mini's architecture appears even more controversial than the processor swap: The switch from ATI's Radeon 9200 graphics with dedicated memory to integrated Intel graphics that use 64MB of system memory have some users up in arms. And while the debate continues, our initial results show the new minis lagging behind their predecessors in Unreal Tournament 2004 by a couple of frames per second.

Some quick tests with minimum settings show that the both the Intel and PowerPC minis can achieve faster frame rates, but (at least with UT 2004) the PowerPC maintains its lead.

A separate quick test with Nanosaur from Pangea software, tested with the Good settings at 16-bit, 1024x768 resolution, show the Intel Macs with an edge. Here's something to note: The Intel minis didn't suffer much of a hit at higher settings in Nanosaur, but the higher settings weren't even available on the PowerPC minis, as those buttons were greyed out. ☹

## Mac mini lab tests

	Speedmark 4.5 Suite	Adobe Photoshop CS2 Suite	Cinema 4D XL 9.5.21 Render	iMovie 6.0.1 Aged filter	iTunes 6.0.3 MP3 Encode	Unreal Tournament 2004 Average frame rate	Zip Archive 1GB Folder
Mac mini 1.66GHz Core Duo	144	3:03	1:26	1:15	1:40	12.2	3:23
Mac mini 1.5GHz Core Solo	123	4:23	2:57	2:05	2:43	10.4	3:39
Mac mini 1.42GHz G4	113	1:47	4:28	2:02	2:16	14.5	4:13
Mac mini 1.25GHz G4	100	2:01	5:06	2:12	2:32	13.9	4:32
MacBook Pro 1.83GHz Core Duo	152	2:49	1:19	1:16	1:31	48.4	3:54
iMac 1.83GHz Core Duo, 17-inch	202	2:44	1:18	1:08	1:22	50.2	2:45
	> Better	< Better	< Better	< Better	< Better	> Better	< Better

Best results in red. Reference systems in italics.

How We Tested: Speedmark 4.5 scores are relative to those of a 1.25GHz Mac mini, which is assigned a score of 100. Adobe Photoshop, Cinema 4D XL, iMovie, iTunes, and Zip Archive scores are in minutes:seconds. All systems were running Mac OS X 10.4.5 with 1GB of RAM, with processor performance set to Highest in the Energy Saver preference pane when applicable. The Photoshop Suite test is a set of 14 scripted tasks using a 50MB file. Photoshop's memory was set to 70 percent and History was set to Minimum. In iMovie, we applied the Aged video effect to a 1-minute movie. We converted 45 minutes of AAC audio files to MP3 using iTunes' High Quality setting. We used Unreal Tournament 2004's Antaluz Botmatch average-frames-per-second score; we tested at a resolution of 1024x768 pixels at the Maximum setting with both audio and graphics enabled. We created a Zip archive in the Finder from a 1GB folder. — Macworld Lab testing by James Galbraith and Jerry Jung



## OPENING UP the intel mac mini



**O**UR first Intel-based Mac minis have arrived. And what was the first thing we did with one of these innocents? That's right. We got out our putty knife, popped it open, and spilled its guts out faster than you could say "CSI!"

Here's a quick tour of the patient's revised anatomy.

At first glance, the Mac mini hasn't changed much from its previous version. However, there's one gigantic change that may not be apparent: the easily-accessible RAM slot on the left side (A) is gone. Or to be more accurate, it's been turned on its side and hidden from view. (More on this in a moment.)

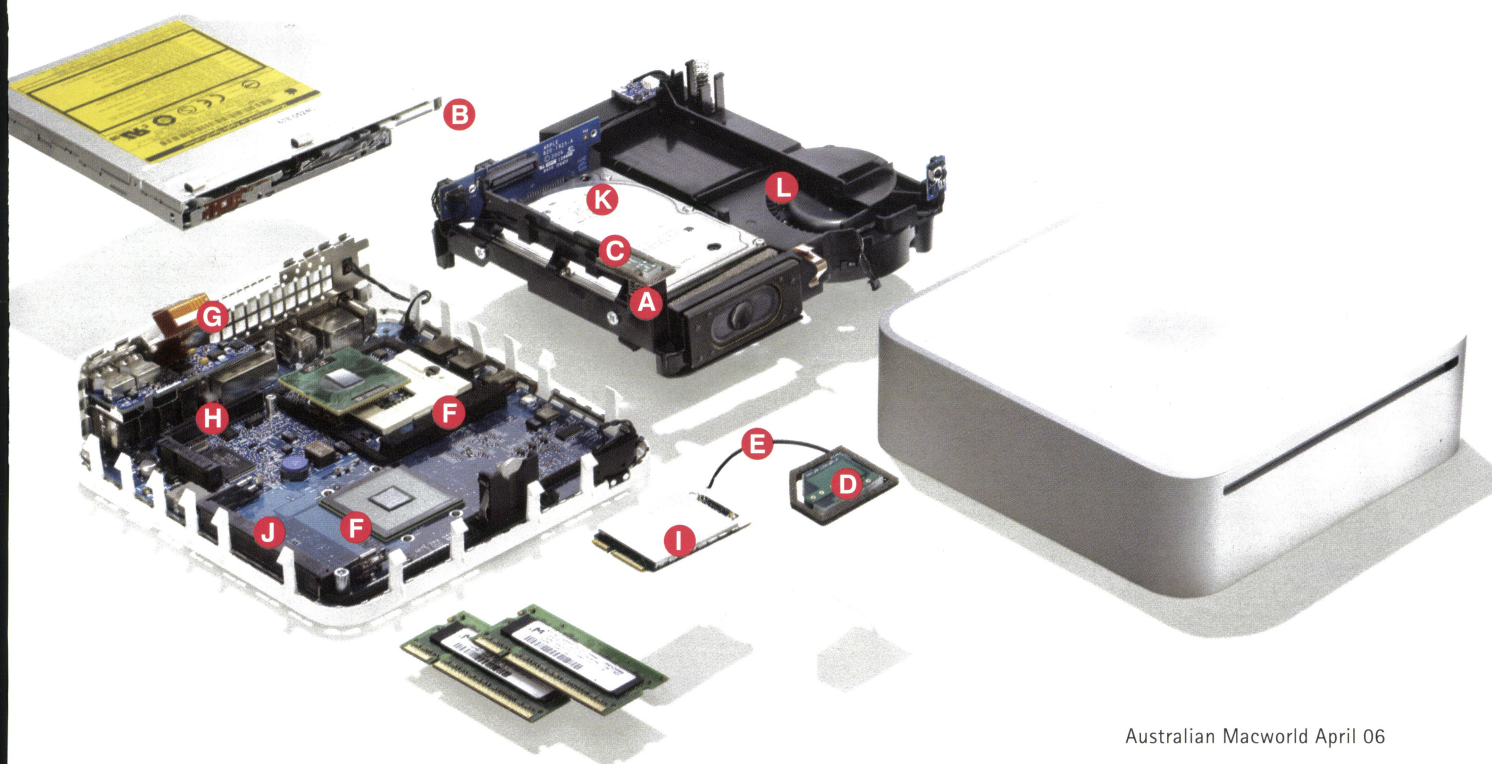
On the far side of the case you can see the new infrared receiver (B) right at the end of the optical-drive slot.

The Mac mini's Bluetooth (C) and AirPort (D) antennae are still in place, although these versions seem a bit more robust than the we-just-taped-it-together feel of the previous model. There's one other change that's a bit hard to see from this photo, but it's just beneath and behind the AirPort antenna (E): the Mac mini's Bluetooth card, relocated to the top of the drive cage.

Next, we removed the drive cage (four screws, just like the previous model) and gingerly lifted it up, removing the interconnect card from its slot and disconnecting another cable carefully. Folding the drive cage back, we reveal the inside...

Things are a bit different under here. We've got two large heat sinks (F) (one for processor, one presumably for video circuitry). There's a little perch (G) at the back for the new "penthouse" on port row, belonging to the audio-in and -out ports. Just below the interconnect slot (H) is the built-in AirPort Extreme card (I) (you can see the antenna snake off to the right). At the front left you can make out the two RAM slots (J), one on top of the other. SODIMMs slide right into here, lying on their side. It's a tight squeeze, but SODIMMs like to snuggle, so it's okay.

On the bottom of the drive cage you can see the 2.5-inch hard drive (K), although now it's of the Serial ATA, rather than parallel ATA, variety. To the right resides our old friend the fan (L). ☹





## THE MAC MINI from a gamer's perspective



**I**F there's one thing that's abundantly clear, it's that the Mac mini is very different things to different people – and that includes Apple.

Rarely can I think of a time when the opinion on a new device from Apple has been so varied as it has been since the launch of the Intel-based Mac minis.

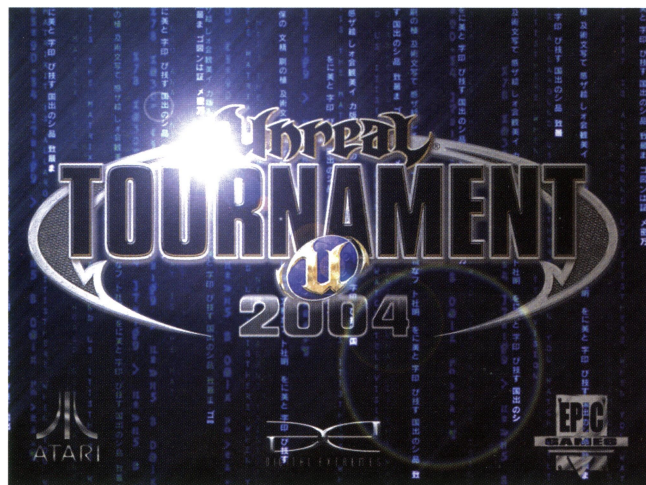
Much of the debate has centred around Apple's use of Intel integrated graphics on the motherboard, in place of a discrete graphics chip like the old Mac mini, which featured an ATI Radeon 9200 graphics processing unit and 32MB of dedicated VRAM.

The new system uses an Intel GMA 950 chip, which doesn't have any discrete VRAM – instead, it borrows the system's main memory for its own needs. So if you have 512MB of RAM installed, 80MB of that disappears for the graphics chip's use, reducing your effective amount of RAM to 432MB.

**The good.** There are some upsides to the new graphics chip. Because it has twice the amount of RAM allocated to it compared to the 9200, and because the GMA 950 can support pixel shading, the Mac mini is, for the first time, capable of displaying graphics effects rendered using Tiger's "Core Image" technology.

Among other things, Core Image provides a plug-in architecture for accessing filters, transitions and effects packages that are built right into the operating system. These effects are used by Apple to create the "ripple" effect when you fire up a Dashboard widget, for example. Core Image effects are leveraged by third-party developers and by Apple in its own software.

Another thing the GMA 950 is better at than the Radeon 9200 is its fill rate. It's capable of rendering almost fifty percent more pixels per second than the Radeon chip that was in the older Mac mini.



Apple's senior director of desktops, Tom Boger, told me that this results in improved performance for iLife '06 on the new machines, and Front Row – a new addition to the Mac mini that's certainly welcome to anyone who plans to use the mini to view photos, watch videos, or listen to music.

In our preliminary tests, the new Mac mini (the Core Duo model in particular) also seems a lot more capable of playing back high definition video. That also bodes well for people who want to use their Intel Mac mini as the cornerstone of a tiny Mac-based media centre.

**The bad.** The GMA 950 has a number of downsides, however.

The chip isn't capable of programming vertex shaders – one of the more common ways that 3D graphics for games and other 3D-intensive applications work. The Mac's CPU has to make up for this shortcoming.

The GMA 950 is also incapable of doing transform and lighting effects. Transformation involves the conversion of a 3D object to a 2D view – your computer monitor. Lighting, in this case, is making that 3D object look more real by making it reflect, refract, and absorb light. The Mac mini's spiffy new Intel CPU also has to make up for this shortcoming.

It's a good thing the new Intel chips are a lot faster, and the system bus and other various components have been sped up too.

Speaking of speed, there's an important reason why Apple emphasises (but doesn't insist) that you should install RAM in pairs in the new Mac mini. It features a dual-channel memory controller – the machine can move double the amount of data through its memory than it could otherwise.

As I said before, the GMA 950 is integrated and doesn't have its own discrete video RAM, or VRAM. It allocates its own frame buffer memory from the main system memory. Installing RAM





in matched pairs can improve your Mac's overall performance when you're running software that's likely to put a toll on the graphics chip.

This is very similar to the iMac's memory architecture. Because the iMac has its own discrete graphics system with its own VRAM, the difference in performance between one chip and two is less noticeable.

**The ugly.** Unfortunately, that overall speed increase isn't enough to make up the difference when it comes to playing 3D games on the new Mac mini. 3D graphics chips and cards have supported these features for a while, so they've become standard issue on most games. And what we've learned is that the new Mac mini is even a bit slower than its PowerPC-based predecessor when it comes to running older titles like Unreal Tournament 2004.

Now, the older Mac mini was no speed demon when it came to playing games: We clocked the 1.42GHz PowerPC G4-based Mac mini at about 12 frames per second when we benchmarked it using Unreal Tournament 2004. The new Core Solo Mac mini averaged about 10 frames per second using the same test, running a Universal Binary of Unreal Tournament 2004.

I readily admit that's only one test, and it's not conclusive enough to write off the Mac mini as a gaming machine all together. Apple's Boger told me that Apple's tests showed a considerable improvement in frame rate on Pangea Software's popular 3D action game Nanosaur II, for example. That's not entirely a surprise, though, as Nanosaur II emphasises CPU speed over GPU capabilities. The Mac mini is unquestionably faster in that regard.

**The times they are a-changin'.** Up until this machine's launch, Apple pooh-poohed integrated graphics as inferior. Apple's Mac mini web page read (in part):

"Go ahead, just try to play Halo on a budget PC. Most say they're good for 2D games only. That's because an 'integrated



Intel graphics' chip steals power from the CPU and siphons off memory from system-level RAM. You'd have to buy an extra card to get the graphics performance of Mac mini, and some cheaper PCs don't even have an open slot to let you add one."

I asked Boger about this. That was reflective of the state of the industry fourteen months ago, when those remarks were made, he told me, and things have changed since then. The GMA 950 represents a newer and more capable generation of integrated graphics processors. And in all fairness, Intel didn't introduce the chip until May of last year – five months after Apple's web page went up.

But Apple's new web site for the Mac mini says "The Intel GMA950 graphics supports Tiger Core Graphics and the latest 3D games".

And frankly, that's an assertion I dispute. Tiger Core Graphics? Sure. The latest 3D games? Probably not so much. We can play semantic arguments until we're blue in the face about what "latest 3D games" means, but a lot of users have higher expectations than what our initial tests are showing as possible for this machine.

I'll be the first to tell people that if they want a gaming Mac, they're much better off looking at an Intel iMac or even a MacBook Pro. With each additional Universal Binary game we're getting, we're seeing great performance on both these machines.

The Mac mini might be a bit of a disappointment to people who wanted it all – a great gaming and media machine, a general workstation, and more, all in a tiny box. There's certainly room for debate as to whether the GMA 950 was the right move.

But there's always room for improvement. ☹





# The new Yahoo! (and it didn't take Google to think of it)

**W**HEN Yahoo! launched it was little more than a neatly organised set of cool web links. Stanford students Jerry Yang and David Filo started the site in their campus dorm room in 1994 as a way to keep track of their bookmarks. Before long, their bookmarks became a directory, and as the list grew longer, they split it into categories. Yahoo! was born, and instantly became a key web site for people learning their way around the net.

Now, when people want to find something on the net, they don't just go to Google, they "google" it. The search giant is so ubiquitous that it has entered the realm of trademarked verbs used in everyday parlance along with hoover and kleenex.

But something strange is happening in a world where web site operators compete desperately for Google pagerank. The directory model is back, but it has been reinvented.

Now, internet users are voting for what should appear in directories with their clicks. Social bookmarking services like del.icio.us have provided a way for anyone to feed their favourite bookmarks into a communal directory, tagged with useful search keywords so others can easily find them. Their ranking in the directory is determined by how many other people have also bookmarked them.

The same thing is happening in online news. After years of consuming news based on what the media decides is interesting, internet users are taking matters into their own hands.

A powerful new model for discovering and promoting interesting tech news online has taken hold in recent months: vote-driven news aggregators. Users submit links that are interesting to them, and if other users find them interesting, they vote for the link.

The concept is a cross between high profile blog sites like Slashdot and social bookmarking services like del.icio.us.

Vote-driven aggregators resolve the problems of both those sites: Slashdot has always had an opaque, undemocratic story selection process that keeps some users happy but frustrates many others.

Meanwhile, totally democratic social bookmarking services face the problem that while many people will find a page interesting, they won't necessarily think it worthy of bookmarking for future reference.

Vote-driven news aggregators allow the public to promote stories that they think are interesting. Equally ordinary people can reach an enormous audience if they have something worthwhile to say.

**Do you digg it?** Digg.com is the leading vote-based news aggregator. At any one time there are over a thousand new links available for your vote. You can keep track of new links as they appear through a variety of methods including RSS feeds and topic category pages (the Apple page on Digg is always good to keep an eye on). As stories get more votes, they float closer and closer to the top of the list — the Digg front page.



## Hot Links

**digg.com**  
The Digg news aggregator  
**del.icio.us**  
Social bookmarking at its finest

Because the stories that rise to the top are entirely chosen by readers, the topics are often unique and very interesting. They're often topics that would rarely get page space in mainstream media because of legal sensitivities or because of a perception that the topic is of interest to a limited audience.

For example, when this article was written, popular Digg entries included:

- > LED Throwies: an inexpensive way to add colour to any ferromagnetic surface in your neighbourhood. An LED, a battery, some tape, a magnet and lots of fun!
- > Download movie trailers without QuickTime Pro
- > Javascript effect to fade between images
- > Ancient cave full of ancient teenage graffiti

The reward for writing interesting stories is an avalanche of incoming traffic. Digg now gets over 10 million page views a day, and stories that catch the interest of Digg users will get thousands and thousands of views each.

The amazing part is that anyone can get their 15 minutes of fame if they write things that other users deem to be insightful or interesting. If they keep up the quality of writing, they can get continual traffic from Digg, and along the way gradually build up a loyal audience. It's such a successful formula, it's rather surprising Google didn't think of it (though you can be sure Google is working on a competitive service).

The people behind Digg say they are now working on expanding the site beyond tech news categories to cover all of the web. So, if you have a Bali travel blog which has some unique and quirky content, but doesn't seem to be getting the traffic it deserves, keep an eye on the evolution of news aggregators: there's every chance that like-minded web surfers will digg your articles. ☞

## And then there was podcast

Digg founders Kevin Rose and Alex Albrecht (formerly hosts of TechTV's *The Screensavers*, a now-axed cable TV technology news program with a cult following) are also the producers of one of the most popular podcasts on Apple's iTunes Music Store. The secret sauce in their podcast's popularity? Kevin Rose told *Playlist Magazine* that "... there's not a single story that we choose that's our own, we take just the stories submitted by the users. We couldn't do it without them; they're the ones writing the stories. We read verbatim their exact title and description of the story."

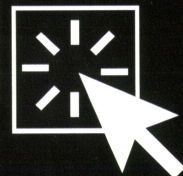
Dan Warne is passionate about the state of broadband in Australia.



04.2006

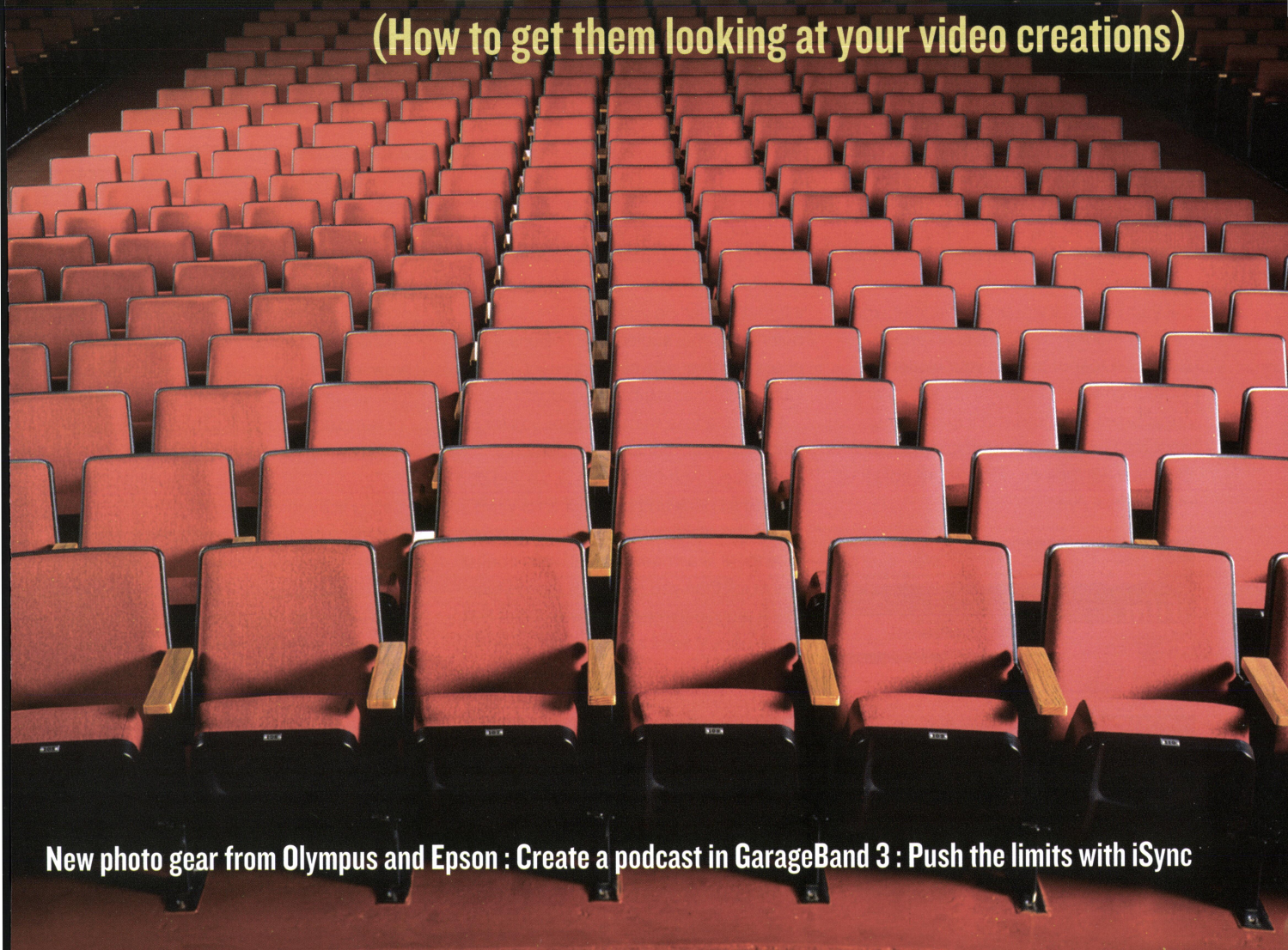
# The Hub

YOUR DIGITAL LIFESTYLE



## EYEBALLS

(How to get them looking at your video creations)



New photo gear from Olympus and Epson : Create a podcast in GarageBand 3 : Push the limits with iSync





## Hot Links

[www.ifilm.com](http://www.ifilm.com)  
[www.youtube.com](http://www.youtube.com)  
 Online cinemas  
[www.atomfilms.com](http://www.atomfilms.com)  
 Watch for online film competitions  
[www.triggerstreet.com](http://www.triggerstreet.com)  
 Submit films and scripts for critical appraisal  
[www.metroscreen.com.au](http://www.metroscreen.com.au)  
 Home of the Metro Members' Production Group  
[www.fti.asn.au](http://www.fti.asn.au)  
 Film and Television Institute WA, with a Member Production Group  
[www.openchannel.org.au](http://www.openchannel.org.au)  
 Victoria's screen resource agency  
[www.auroratv.org](http://www.auroratv.org)  
 A community channel broadcast on Fox Digital  
[www.channel31.org.au](http://www.channel31.org.au)  
 Community broadcaster found in a number of capitals  
[www.thecomedychannel.com.au](http://www.thecomedychannel.com.au)  
 Foxtel channel which runs film competitions  
[www.tropfest.com](http://www.tropfest.com)  
 Annual short film festival  
[www.flickerfest.com.au](http://www.flickerfest.com.au)  
 Major short film festival based out of Bondi  
[www.australianshortfilms.com](http://www.australianshortfilms.com)  
 A directory and news site for local short festivals  
[www.filmfestivals.com](http://www.filmfestivals.com)  
 Watch the festival scene around the world



# Getting it out there

If a movie is made in your office, but it never reaches an audience, have you really made a film? A bit too zen perhaps — yet for the majority of small productions, making the project is where the story often ends. Despite all the sweat and tears that may go into the work, it will often languish on a DVD with an audience of no one more notable than family, friends and a few neighbours.

Visual storytelling is an art that is founded in display, and it has never been easier to put yourself out there and have your work seen by thousands. There is an understandable fear of putting your work on wide-open view. Once you suck it up and put yourself out there you'll realise your work will become a lot better a lot faster. Even you will look on with a more objective, more critical eye.

Here is a look at some of the outlets to aim for and the ways in which you can get your film to shine its flickering light across the faces of keen viewers. Hopefully you'll find it isn't all that intimidating and you can take baby steps along that road to Sundance!

**Online.** The internet is a great place to start, with no serious barrier to entry and its inherent nature as a wide content distribution platform. There are many options on the internet for getting your film in front of a potential global audience of millions — it's all about the quality of the product, not the capacity of the distribution budget.

It is also a less intimidating option for a new filmmaker. It entails less personal involvement with the audience, so you don't have to sit back and bite your nails while you sense the reaction of a room full of viewers. Plus there is a chance to get more honest feedback than you might get face to face — that's a good thing, by the way. Don't fear some honest feedback!

**Get hosted.** It's cheaper than ever to get your own domain and get some web hosting to store your work in your own online space. This is a great option if you're keen to send out links to via e-mail, or even to create a portfolio space for your videos. By doing it yourself, you can attach a personal web site to help promote yourself

and your work, rather than just having your work speak entirely for itself.

If you do achieve even a moderate number of viewers, pay attention to the monthly bandwidth you have available with your host. You don't want people turned away at the door because you've run out of bandwidth for the rest of the month.

Remember to compress to a good online format and size to make it easy for visitors to view your work. While you might want to offer a high-res download version, making a smaller frame rendering for direct view in a browser. Catering for different kinds of visitors will get you a lot more viewers.

Examples: Too many to mention. Search "web hosting" and take your pick.

**Video distribution web sites.** While DIY hosting is a more controlled option, submitting your work to a general video hosting site could expose you to more viewers than you could find through your solo efforts. You can still distribute a link to your productions to anyone you like, but you'll also have the potential to have an audience of people who you'd never otherwise have found. Video sites attract people who are keen to look browse around for short videos and they could easily stumble upon your films while searching for something new to watch. The rating systems attached to these sites mean if your video gets some good ratings, you'll





be getting more attention on the site and even more viewers.

These sites may still require some effort on your own part to tag the video and help spread the word to get the ball rolling, but if you've made something good it will have a great chance of snowballing into something seen by tens of thousands.

Examples: iFilm; YouTube

**Online festivals and competitions.** Instead of just putting it out there and hoping for an audience, there are festivals and competitions you can submit your work to for more serious critical examination. You'll need to do your homework and watch the sites for calls for entry, and it is likely you'll need to output your film in a specific fashion to be eligible to take part. The extra effort is worth it for an opportunity to get a more genuine critical appraisal of your work from a more enthusiastic base of film-lovers.

To highlight the backing involved with some of these sites, Atom Films is the home of the annual *Star Wars* fan film competition. George Lucas himself gives an award to his favourite finalist. Trigger Street, on the other hand, was created by Kevin Spacey as an outlet for young writers and directors to have their efforts critiqued, with the best of the site gaining a foot in the door with Hollywood.

Examples: Atom Films; Trigger Street

**Videocasting.** If you've got something you want to distribute on a regular basis — a serialised story, a short documentary series, or your own TV show — videocasting is a great option. You'll need to stick to some strict rules on output formatting so viewers can use the video with their device of choice, but it could be a great way to build an audience and get yourself into a vein of creativity.

This can be tied in with running your own hosting by packaging your regular video productions into a blog format with RSS feeds to distribute your content. Or you can use a free blogging service and embed your videos in the posts — some may offer file hosting while others will need to be linked from separate video hosting sources. You can then submit your feed to the iTunes Music Store for inclusion in the podcasting area, where you can make your play for becoming an online videocast producer du jour.

Examples: iTMS podcast listings

**"Viral" e-mail.** This can be attached to any of the above ideas, or you could go for the more dangerous option of attaching a video directly to your e-mail. If you do that, make it as small as you can lest you invoke the wrath of everyone whose inbox you bring to a standstill. That said, it isn't easy to make an e-mail become truly "viral". That's more a mark of the quality of the content — and "quality" doesn't necessarily mean "good". More often than not,

## Big screen, big cost

While most festivals will have the ability to screen your film from a disc or standard tape source, some festivals will require you to give them your film on actual film. If you're at that point of breaking into the big festival scene, you'll need to use a professional film lab to produce a transfer to film. This is a costly exercise, and you will at this point need to explore Cinema Tools in Final Cut Pro or other similar output tools that will produce a version of your work ready to be transferred to a 24 frame breakdown. We'll take a look at this area of production in an upcoming issue.





we're talking about *Funniest Home Video*-type content being the big winner in the viral stakes. You can do the hard yards of sending out tens or even hundreds of e-mails to people in your address book to encourage an influx of visitors to your productions. Doing an e-mail drive should be part of marketing your work, so it doesn't just lie fallow on some lonely server.

Examples: probably landing in your inbox on a regular basis

**Offline.** Online is convenient and cost effective, but what most filmmakers really want is to see their work up on a big screen in front of an enraptured theatre audience. Real screenings hold more prestige and a greater sense of achievement, with a tangible audience delivering a direct pay-off for all your efforts. Getting a real screening requires a lot more work. Thankfully, there are some in roads that can make the path to Cannes seem a lot less painful.

**Production groups.** All around the country there are film and video production groups that bring filmmakers together to work together on new projects as well as provide a way to show your own productions to a sympathetic audience. This is a great avenue for constructive feedback, which can help you go back and refine your work into something outstanding. Or stop wasting time on a bad idea. Many of these groups will also hold special screening events, where members of the group invite friends along so that together you can fill a theatre and show your work on a real big screen in front of many people you don't know. In itself, this is an end result — having your film screened before a large audience of strangers. It is also a great way to assess your work and look to improve it for more important screenings in future.

Examples: Metro Screen (Sydney); FTI (Perth); Open Channel (Melbourne)

**Television.** It isn't quite as difficult to crack a place in television as you may think. As long as you aren't looking for a prime time slot on free-to-air, that is. Community television is out there, on both free-to-air and cable, and many are looking for short films to screen in various time slots. Some are for special programs that showcase new Australian work. Others are for very short work to screen as fill-in between the hour and half hour timeslots. Take a look at the station web sites and get in touch with their offices. Being broadcast anywhere is something that will make a nice addition to your production resume.

Examples: Aurora; Channel 31; The Comedy Channel

**Festivals.** Probably the number one target for any filmmaker is to be screened in competition at a major film festival. Aside from the international majors for feature and short film, there are many festivals around the country — and hundreds around the world — that may not be the big time but are competitive and a fantastic opportunity to have your work seen by thousands. This is where serious critical appraisal will arrive, which should have significant impact on the quality of your future work. No film festival, however small, should be underestimated for what it can offer — you never know who may be there and see your film, which could lead to much bigger things.

There are web sites for keeping track of entry deadlines for festivals around the world, and many industry magazines will list calls for entries all around the country. As you track the options, mark the timings in iCal so you can set annual reminders of upcoming festivals. You'll quickly realise there are many opportunities to get your film out there and you should try to enter every appropriate festival. It might take some serious legwork, but don't be too selective. Enter everything you can. Tenacity and stamina in this department will deliver rewards. You've just got to ask yourself how much you want your work to be seen.

Examples: Tropfest; Flickerfest; AustralianShortFilms.com; FilmFestivals.com

**The last word.** Your film needs you to put in a lot of hard work well beyond the final cut. Some may say this is harder than making the film. Hollywood studios spend more on the marketing than they do on the production.


## Shoot to suit

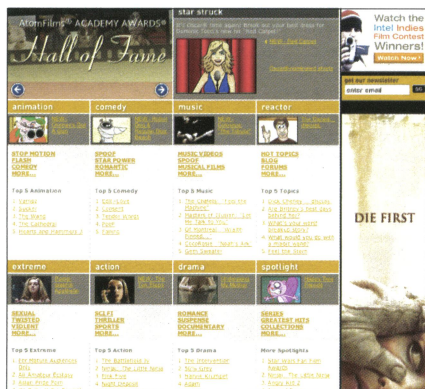
Many films are made with no thought to an intended output format. If you know where you will be putting your work on display before you even pick up the camera, you can make better shooting choices to ensure the final product will not be fighting the medium. Sometimes a few limits to your options can help you make excellent creative decisions.

If you intend your film to spend its life being viewed online, keep the smaller viewing space and bandwidth limits in mind. Compression formats for online viewing will be at their best when you minimise unnecessary camera movement, which in turn will help deliver a smooth playback experience. You should shoot on tripod as much as possible, opting for locked-off shots with good cutting between different angles rather than sweeping moves or zooms. Fast movement is definitely a problem for online, so avoid it unless you want to create blurred, confusing effects in your production.

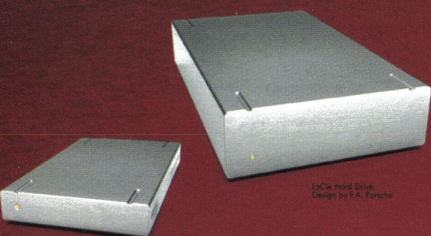
Finally, close up shooting works very well for online presentation. Limits in window size make wide shots difficult to pick out details and interactions, so a series of good cuts around tighter shooting of subjects and scenes is a much better way to present in this medium.

If you're shooting for the big screen, be wary of the fact a lack of limitation can actually be a curse. You really need to search for just the right angles and camera movements to make your work outstanding and bad decisions will be writ large for all to see. Even slight shooting errors need to be reshoot again and again until perfect. This is the big time. If you want to fit in, you've got to pay attention to every detail.

You may not have a big marketing machine behind you, but between excellent online opportunities and the avenues available for pushing your work into the public arena, little money and a lot of hard work can still get your work noticed in the film scene. 







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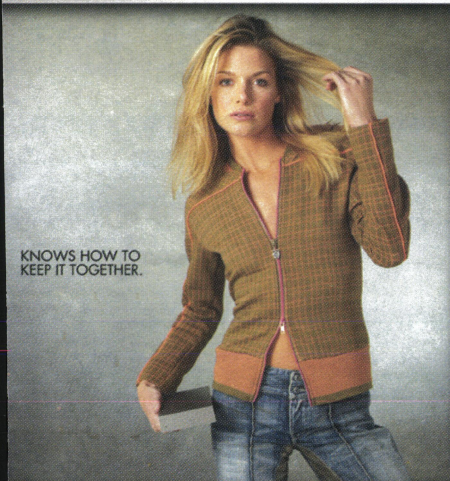
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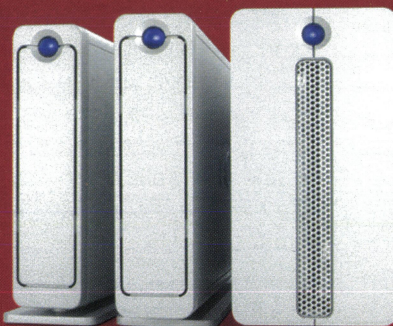
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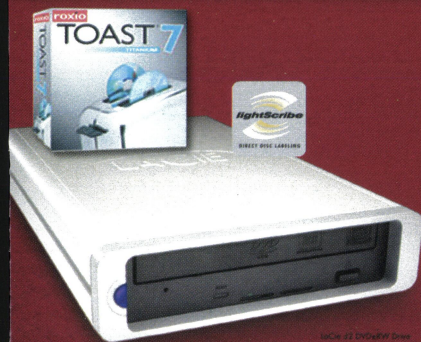
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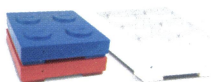


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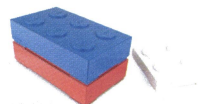
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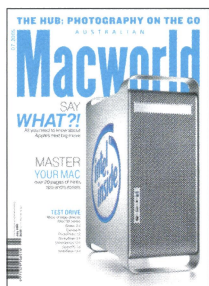
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By Phil Luces



## Hot Links

[www.epson.com.au](http://www.epson.com.au)

Australian home of Epson products

## Centre of your needs

**A**DDING to its already substantial range of multifunction printers, Epson has released a new highly-specified, reasonably priced device for all your photography needs. The Epson Stylus Photo RX650 is designed as an all-in-one photo centre, and features a 2.5-inch LCD screen for previewing and editing your photos. The LCD screen has a 256-pixels-per-inch resolution, which Epson claims to provide much higher resolution than most LCD screens and thus offer more accurate feedback for editing images.

At the guts of the Stylus Photo RX650 is a six-colour printing system (black, magenta, cyan, yellow, light magenta and light cyan) that is capable of producing prints with resolutions up to 5760dpi x 1440dpi. To create prints of even finer detail, the Stylus Photo RX650 is able to produce ink drop sizes as small as 1.5 picolitres. This, combined with Epson's VSDT (Variable Sized Droplet Technology), makes the Stylus Photo RX650

suitable for all kinds of photographs. Also, if you're worried about speed, this printer is capable of producing a border-free 4x6-inch (10cm x 15cm) colour print in 45 seconds.

But the RX650 is not only a printer. Epson has integrated a 3200x6400dpi scanner into the top of the unit. Epson claims this makes the Stylus Photo RX650 the highest-resolution MatrixCCD scanner in its class. More importantly, for those looking to get their old slides and negatives into digital form, the Stylus Photo RX650 comes with a built-in transparency unit, which allows users to scan both negative (one strip of six at a time) and positive slide film (four mounted slides at a time).

The fun doesn't stop there. As with most new printers these days, it's possible to print directly to the Stylus Photo RX650 from either a media card — including xD-Picture Card, Smart Media, CompactFlash, Memory Stick (various types) and SD/MMC — or a PictBridge-enabled digital camera, without the need for your Mac to be involved.



**Everything but the kitchen sink.** Epson's Stylus Photo RX650 packs high-res film scanning and printing as well as CD/DVD printing in a neat package.

To add even more flexibility, the Stylus Photo RX650 is able to do direct copy and printing to CDs and DVDs. The printer automatically crops a scanned or memory card image to the appropriate format and size for an optical disc and allows you to print directly onto a printable disc. Up to 12 images can be utilised on one disc.

The Stylus Photo RX650 comes with a USB 2.0 interface for connecting to your Mac as well as an IrDA-compatible infrared port for connecting to wireless devices, and Epson also offers an optional Bluetooth wireless interface. Priced at just \$499, the Epson Stylus Photo RX650 represents pretty good value. For further details, contact Epson on 02 8899 3666.



## Hot Links

[www.digitaldavinci.com.au](http://www.digitaldavinci.com.au)

Australian producer of iPhoto books

## It's about time

**O**NE of the most tantalising aspects, particularly for those of us in Australia, of Apple's iPhoto is the introduction of professional-quality books you could fill with your own photos. It was possible to do all of this — even pay — within the iPhoto interface. Unless you were in Australia, of course. While online prints through iPhoto have been possible in Australia thanks to shoebox.com.au, the ability to create your own books in iPhoto, like the ones in the US, has sadly eluded us.

Fortunately, a South Australian outfit, Digital Da Vinci, is providing a similar

service for both Australia and New Zealand. With the release of iPhoto 6, Digital Da Vinci has produced an iPhoto plug-in that will enable users to create their books and buy them directly through the iPhoto interface. Digital Da Vinci also has a plug-in that's compatible with iPhoto 5, allowing users of the old version to create, design and buy their own books.

Another feature of iPhoto 6 that will be available through Digital Da Vinci will be the ability to create your own personalised greeting cards and calendars within the application. There are two main types of book available through Digital Da Vinci: a US-Letter-sized (8.5x11 inches), black-linen finish hardcover version, and a 7.8x5.8-inch softcover book with a 300gsm gloss cover. Prices start at \$99 for a 20-page single-sided hardcover book (double-sided is \$109), while a single-sided 40-page hardcover is only \$119



**The Da Vinci Code.** At last, a way for Australians to get great-looking books of their photos, all through the iPhoto interface

(\$129 for double-sided). The softcover version is \$79 for 20 pages (double-sided) and \$89 for 40 pages (double-sided). If you're looking for something extra special, you can go for one of Digital Da Vinci's A3 photo books in a black linen finish. Starting at \$195 for a 20-page, single-sided version, these larger books can't be ordered through iPhoto, unfortunately. You have to provide them with PDFs of each page, preferably created with InDesign, Quark Xpress or FreeHand.





## Hot Links

[www.olympus.com.au](http://www.olympus.com.au)  
Australian home of Olympus products

## High-res beauties

**O**LYMPUS has introduced three cameras designed for demanding photographers, albeit from slightly different directions. Coming in at the high end is Olympus's latest digital SLR camera, the E-330. What's so unique about the E-330, according to Olympus, is that it's the first digital SLR in the world to offer "Live View", constant subject framing via a rear-mounted 2.5-inch LCD monitor. Not only that, but Olympus believes that the E-330 features the first variable-angle LCD screen for a digital SLR. The "Live View" capability and variable-angle LCD screen will help photographers take shots in all kinds of situations.

The "Live View" system works in the E-330 because Olympus has incorporated a CCD that's dedicated to displaying the full-time live view in the optical path of a porro mirror system (similar to the one used in Olympus's E-300). This system not only enables live viewing, but it also makes it possible to have an auto-focus system operating simultaneously.

Not surprisingly, the E-330 features Olympus's Dust Reduction Technology, which helps to reduce the possibility of dust appearing on the image sensor, thus eliminating post-production time. Interestingly, Olympus also claims that the E-330, with its 31 shooting modes, has

more Scene Select modes than any other digital SLR — a bold claim, to be sure. The Olympus E-330 is capable of capturing images in resolutions up to 7.5 megapixels (3136x2532), in RAW, TIFF or JPEG formats. Amazingly, this pocket rocket weighs just over 500 grams, making it a very slim digital SLR for all shooting conditions. Expect to pay \$1799 for the E-330 when it hits the streets.

If your photographic ambitions are little more modest, then perhaps the latest cameras from Olympus's Mju range might appeal. Utilising an all-weather construction, a common feature of the Mju series, the Mju-700 is a 7.1 megapixel (3072x2304) camera that uses Olympus's Bright Capture technology, which the company says ensures that images displayed on the 2.5-inch LCD screen are bright and easy-to-view, even in low-light environments. A 3x optical zoom (a 35mm equivalent of 37mm-111mm) along with the 19MB of internal storage (and support for xD-Picture Card) makes this a great compact digital camera for shooting in all situations. Olympus has also incorporated 23 scene modes — including Portrait, Landscape with Portrait, Landscape, Beach&Snow, Underwater Wide, Fireworks, Museum,

Cuisine, Behind Glass — allowing novice users to get better results without fiddling with the settings. It's also possible to capture short QuickTime movies with sound, making this a very useful device. At just \$499, the Mju-700 is a bit of a bargain, particularly for the novice photographer.

**Feature rich.** Continuous shooting modes and blur reduction technology makes the Mju-810 a great all-round compact digital camera.



**Compact SLR.** "Live View" capability and a variable-angle LCD screen make Olympus's E-330 a great digital SLR for shooting in a tight spot.

If you want a little bit more resolution, then the Mju-810 could be what you need. Featuring a similar form factor and lens (slightly wider than Mju-700), the Mju-810 is capable of producing shots of resolutions up to 8 megapixels (3264x2448) and comes with 32MB of internal memory. More importantly, the Mju-810 has a continuous shooting mode, which allows users to fire off shots at 4.3 frames per second for up to 12 frames, but these frames are limited to three megapixels. If you're interested in low-light photography, the Mju-810 comes with two modes — Available Light Portrait and Candle — which will automatically adjust the sensitivity rating of the shot your taking up to ISO 3200 depending on the lighting conditions you're shooting in. Also, if you're shooting in situations that require longer shutter speeds, the Mju-810 incorporates an Electronic Blur Correction feature to correct blurring after a picture is taken. Olympus states that the Mju-810 utilises a gyro sensor to detect the amount of camera movement. It uses this information to apply the appropriate amount of filtering to fix the problem. If a shot will be blurry, the camera will display a "Blur Mark" icon on the LCD screen, which users can then fix by hitting the Blur Correction button. Priced at just \$649, the Olympus Mju-810 comes with loads of features and plenty of resolution.

As with most digital cameras these days, the E-330, Mju-700 and Mju-810 are all PictBridge compatible. Contact Olympus on 1300 659 678 for further information.

**Hold a candle.** The Olympus Mju-700 comes with a plethora of shooting modes that are sure to make a novice's life a lot simpler.





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# Unlocking Final Cut Pro

With Jon Rishworth

**Jon Rishworth** is a film & video professional. A qualified teacher & Apple Final Cut Pro expert, Jon uses Final Cut Pro daily in his role as senior production supervisor at the Melbourne Metro Fire Brigade's statewide TV station, Fire Vision.

Jon oversees a fully digital production facility, from a five-camera studio to live fire-scene broadcasting. All edited weekly using Final Cut Pro.

**Unlocking Final Cut Pro** is a full-day seminar, uncovering the complete production workflow from capture, to post, to edited broadcast output, or DVD.

**Unlocking Final Cut Pro** is a must for;

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- lecturers & students
- multimedia professionals
- anyone wanting to expand their Final Cut Pro repertoire.

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Jon is not just a fine editor, he is a wonderful teacher who lives and breaths Non Linear Editing. Jon has revealed to me techniques in editing I had never dreamed existed. He has shown me how to exploit the full potential of Final Cut Pro.

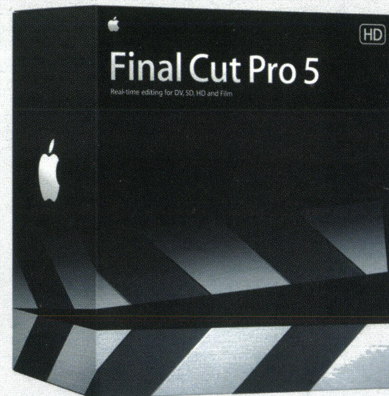
Andrew Kelly  
Broadcast Television Trainer  
Box Hill Institute

Jonos knowledge of FCP is extensive! It's amazing to watch him work-I always think I know all the short cuts until I see how he works! He's saved me hours.

Simon Casamento  
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Jon is an affable, dynamic teacher who hits you with information like a machine gun.

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By David Holloway



## Hot Links

[web.mac.com/nursers/iWeb/Site/Podcast/Podcast.html](http://web.mac.com/nursers/iWeb/Site/Podcast/Podcast.html)

The test podcast

[www.apple.com/au/ilife/garageband/](http://www.apple.com/au/ilife/garageband/)

GarageBand 3

## The podcast kit

**W**HEN GarageBand 3 was released in January, one of its key new features is the ability to create your own podcasts within the application itself. To test how easy this is, here's a step-by-step walk through of a podcast I've created.

You have four different podcasting options: audio (audio-only), enhanced audio (audio plus artwork, markers and URLs), video (video plus audio) and enhanced video (video, audio, artwork, markers and URLs). I chose to do an enhanced audio podcast as I didn't have any need to show footage, just some original music I had composed and some pictures.

**1.** Launch GarageBand and select New Podcast Episode from the window that pops up. You will then be presented with a template GarageBand window that has five tracks: Podcast Track, Male Voice, Female Voice, Jingles and Radio Sounds. It's your choice in what order you record things. My preference was to record my narration first then fit the music and other components around that.

**2.** Double click on the Male or Female Voice track. You can choose whether to record via your Mac's built-in microphone or via any audio interfaces you have connected. Recording is as simple as pressing the record button and speaking. It's worth playing back the result through headphones to make sure it's not too soft or distorted. On the right hand side of your screen you

will see the Track Info section. At the bottom right you can set the parameters for your voice recording. I used my Mac's built in microphone, so once I had finished recording my narration pieces I enabled the speech enhancer. (podcast1.tiff)

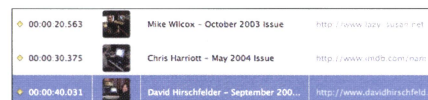
**3.** After spacing my narrations I then dropped in the interview segments I had done. I had imported them into iTunes as AIFF files, which then import directly into GarageBand. It's worth mentioning at this stage the concept of "ducking": it refers to the volume levels between each track. An example would be your music track being softer than your narration, but when the narration finishes it increases in volume. This is automated in GarageBand — you just need to define which track is the lead track and which are backing tracks. Select Ducking from the Control menu and you will see on each track up and down arrows — click on the up arrow for the lead track or tracks, the down arrow for the rest. (podcast2.tiff)



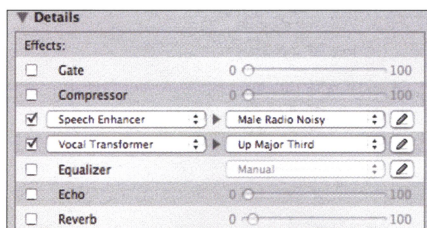
**4.** The next step is the music to go underneath the narration. You are able to use MP3, AIFF and AAC formats (though not protected AAC as you get with music purchased from the iTunes Music Store — these files won't even appear in GarageBand's media browser). As discussed in point 3, make sure you have the correct Ducking settings for this track. Also, don't forget you can use any Apple Loops you have that come with GarageBand. It's all selected from the

media browser. I used an original composition imported from iTunes.

**5.** Now for the enhanced section. Like an iMovie project, you can create markers — each with its associated artwork, title and URL. Drag any picture file directly onto the Podcast Track in GarageBand and then drag it into the preferred position. You can drag from the media browser, which has your iPhoto library, or you can drag from your desktop if it's a file from elsewhere. In this project I placed six photos of previous Pro File interviewees, spaced ten seconds apart. I also added their names and web site URLs. To set the titles and URLs, double-click on the Podcast Track and the markers will appear in the bottom section of GarageBand. (podcast3.tiff) If you haven't already, also name the episode and add your episode artwork — it's in the same window as the markers.



**6.** Time to export your work. You have two options: to export to disk or to iWeb. The iWeb option obviously requires iWeb and a .Mac or other hosting account. If you have those then it's a simple two step-process. Select Send Podcast to iWeb from the Share menu and wait for GarageBand to do its work. iWeb will launch while it is exporting. Choose the template you like from iWeb and you will be presented with your podcast in that template. Add your own text or other elements then select Publish to .Mac or Publish to Folder under the File menu in iWeb. Your page will be uploaded and you can view it immediately. Check out my test podcast as an example (see "Hot links").







## Hot Links

[www.mackiev.com](http://www.mackiev.com)  
New home of Print Shop  
[www.tryandbyte.com.au](http://www.tryandbyte.com.au)  
Aussie distributor

## A long way to the Shop

*(if you wanna rock and roll)*

WITH the advent of the iLife suite of applications, there's relatively inexpensive access to developing quite impressive multimedia projects. Where things can fall down is on the external presentation. Yes, iTunes does allow printing of album covers, but the level of customisation is limited. If you want to make your iTunes, iMovie or iDVD projects something good to look at then there's a reasonably priced option. Broderbund's Print Shop has been around nearly as long as personal computers have been: I remember using it on an Apple II in 1984. Recently a new version was released for the Mac by MacKiev Software: The Print Shop 2. And it's come a long way from the 80s to say the least.

The most obvious thing when launching Print Shop 2 for the first time is the level of iLife integration. You can drag and drop direct from iPhoto, import playlists from iTunes, create projects that match your iDVD theme, mail merge invitations using your Address Book or even create calendars using your iCal entries.

I used my in-laws' 40th Wedding Anniversary as the test project for creating a polished product. I was producing a CD of songs from the year they were married as well as a short DVD with photos from their life together, also with accompanying soundtrack. For the DVD I had used a theme from iLife 06 so I was pleasantly surprised that MacKiev already had an updater available

that added the new themes to Print Shop. All I had to do is select the DVD case option from the project menu and choose the iDVD theme that matched. Some replacement of text and dragging of photos from iPhoto took me a whole fifteen minutes. Printing was also simple — you can use plain paper or templates provided by companies such as CD Stomper and Neato (A4 Avery label support in development at time of writing). I took the time to make sure I had the right template and it paid off — only one failed printing attempt before I successfully printed half a dozen covers.

Other notable features are a large stock photo and graphics library, support for a number of Epson and Canon printers that print direct to the CD or DVD itself and built-in photo editing capabilities including photo effects and cropping options you won't get in iPhoto itself.

If you regularly create small projects for relatives, you may find this application makes your life easier and also gives your projects a flair that they may not have previously had. The Print Shop 2 will set you back \$90 and the Australian distributor is Try and Byte (02 9906 5227).



## Hot Links

[www.sonos.com](http://www.sonos.com)  
Full demo of the system

## The sound of Sonos

FOR the hard-core audiophile and music fan alike, having your music playing anywhere you want in your home is desirable to say the least. The usual solution is hard-wired and then there are some wireless options such as AirPort Express and the HomePod. US-based company Sonos has released its Digital Music System, which takes the wireless music streaming to a different level indeed. The system consists of two primary components: the Zone Player — essentially a wireless receiver and stereo amplifier with audio inputs and outputs — and the Sonos Controller, which is a very swish remote control with LCD screen and scroll wheel.

The idea is that you put a ZonePlayer in each of the rooms you want music streamed and connect speakers to each. Connect your Mac to one of the ZonePlayers via Ethernet and it then communicates wirelessly with the other ZonePlayers — there can be up to 32 of them per system if you have a particularly large house. If you don't want your Mac running whenever you want music, you could purchase a Network Accessible Drive and put all your music on it or do the most obvious thing and hook up an iPod. You can plug an iPod into any ZonePlayer and it'll be heard across the entire network. The wireless network itself is a proprietary one and will co-exist with any existing wireless networks.

There is one downside to the Sonos system if you buy music from the iTunes Music Store. The supported formats are MP3, AAC, Ogg-Vorbis, Windows Media, WAV, Flac and AIFF, however protected AAC files aren't supported. The system does work fine with Real Networks' Rhapsody online music store.

The Sonos system costs \$2399 for the starter bundle which has the Controller and two ZonePlayers. ZonePlayers retail for \$999, the Controller for \$799. If money is no object for home-wide sound, then check the excellent online demo for a taste of what to expect. The Australian distributor is Playback Systems (03 9885 5888).





By Anthony Caruana



## Hot Links

[www.pocketmac.com](http://www.pocketmac.com)  
 Pocket Mac GoBetween  
[www.e2sync.com](http://www.e2sync.com)  
 e2Sync  
[en.isync-hilfe.de/](http://en.isync-hilfe.de/)  
 DIY iSync Phone Plugin  
[www.novamedia.de](http://www.novamedia.de)  
 Nova Media

## The iSync Entourage

I love iSync. Apple's integration of remote devices into OS X is nothing short of brilliant. There's broad device support and the application is designed so that third parties can extend it in lots of different ways.

However, it does have one shortcoming — it only provides a bridge between your mobile phone or Palm PDA to iCal and Address Book. That means if you're an Entourage user you'll need to come up with some other sync solution. At least, that's what it used to mean.

Pocket Mac's Go-Between and e2Sync let you sync any iSync-compatible device with Entourage. Both work in similar ways by providing a mechanism for synchronising your Entourage data with iCal and Address Book. Then you can use iSync to connect your mobile device and it's updated from Apple's PIM programs.

**PocketMac GoBetween for Entourage.** PocketMac has a sync app for just about every mobile device category you can think of. My experience has been a little patchy.

Once GoBetween was installed it added an item to iSync. From there you can set

what data GoBetween will manage. For example, you may not want to sync Calendar data but want to sync Contacts. This is OK but you can't apply any filters such as when you might only want to sync a particular data category and not your entire diary.

The first time I started iSync after installing GoBetween I was prompted for some registration information. This caused iSync to crash.

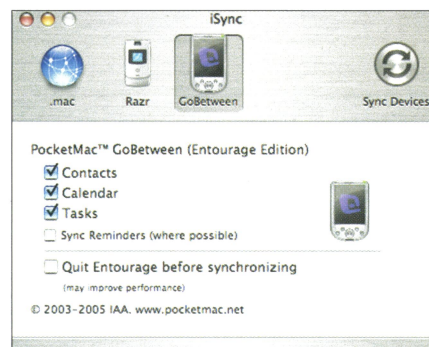
The first connection between Entourage and GoBetween gives you the option of deciding whether Entourage or the Apple apps have the latest data. However, it would have been nice if the options were given clearer descriptions as I was left wondering if I'd picked the right option and wasn't going to overwrite important data.

Once I'd got over my initial gripes, GoBetween seemed to operate as expected. Close inspection did reveal a few problems with one recurring appointment where not all instances were replicated.

If you're using categories and Entourage's Project Center you'll find that appointments in different categories are placed in separate calendars. While this might be handy, there's no way to toggle that feature on and off.

**e2Sync.** The folks from e2Sync take your data very seriously. You are warned at least three times to check the Readme file before proceeding with installation so that you're fully aware of what the application does and how it interacts with your precious PIM information. Unlike GoBetween, e2Sync comes in a 10-day trial version so you can try it out before shelling out your hard-earned.

The first thing I liked was that it was easy to set e2Sync so that would do a one-way push from Entourage to iSync rather than bi-directional replication. This is what most people will want and it removes the danger of having the seldom-used Apple apps overwriting Entourage.



You can specify specific data categories for synchronisation. This can be handy if you only want a certain group of contacts to be replicated to your mobile phone through iSync or if you only want a particular calendar in iCal so that it can be published over the web.

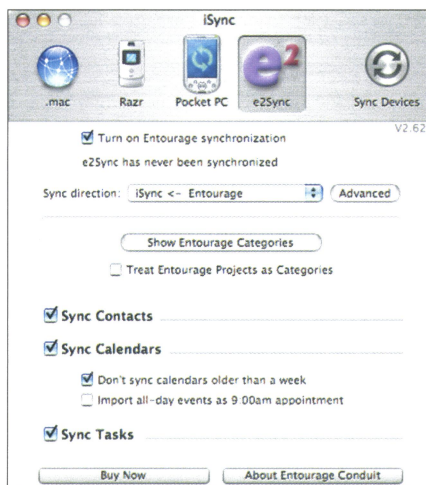
**The last word.** While both GoBetween and e2Sync basically do the same thing, e2Sync gets there more reliably and with more options so that you replicate exactly what you want from Entourage to your mobile device. At \$US39 e2Sync isn't cheap but the price includes all future upgrades including future OS X upgrades and can be used on two computers. Although GoBetween is cheaper at \$US24.95 it's only licensed for one computer. My recommendation is to spend the extra money and go for e2Sync. The multiple computer licensing, greater stability and flexibility make it the clear winner.

## iSync Booster

**One of the biggest gripes many of us have with iSync is that support for the latest phones can be a little slow coming from Cupertino.**

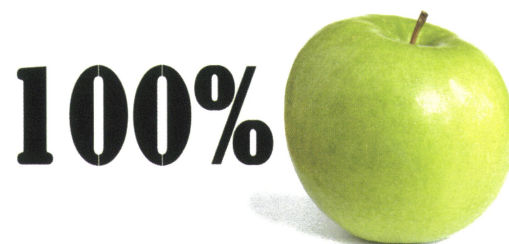
**One way around this is to create your own iSync plug-ins. There are several sites that describe this process but I like DIY iSync Phone Plugin. The neat thing about creating plug-ins like this is that they'll still work even when Apple releases updates to iSync.**

**If you're not inclined to roll your own then you can download some ready-made plug-ins from Nova Media. That way you won't feel like you're stuck in Infinite Loop waiting for your phone to be supported.**





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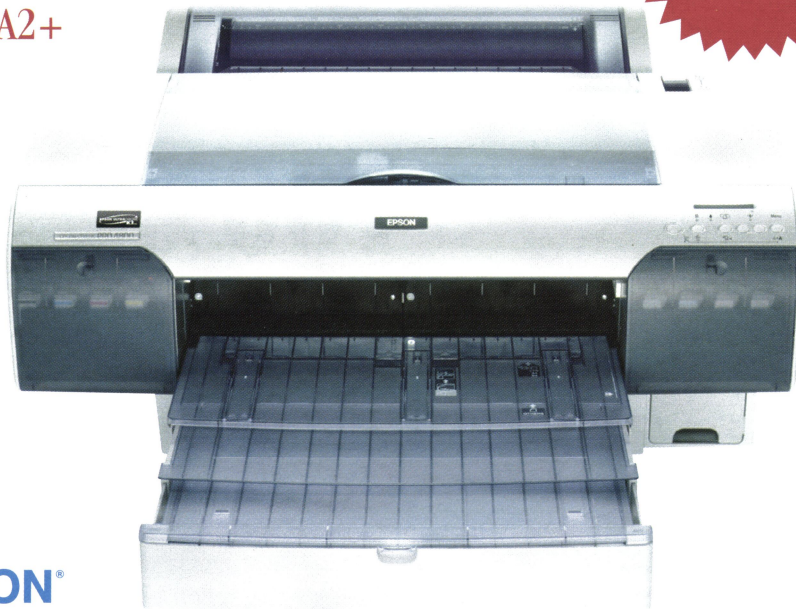
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Apple and education in Australia.

By Martin Levins.

# Professional development development

In January, I wrote about the concern that the educational community had regarding the state of play vis-à-vis Apple Australia's support for education (OK, I admit it, I've been talking with far too many middle management people — you'll see a bit of that jargon here). Essentially, there were two sides to my argument: that of professional development in general and the Apple Distinguished School (ADS) and Educators (ADE) programs.

Because of the programs you will see soon, I'm led to believe that the commitment is still there, or at least the recognition that commitment is necessary has been made, and an integrated approach is being developed.

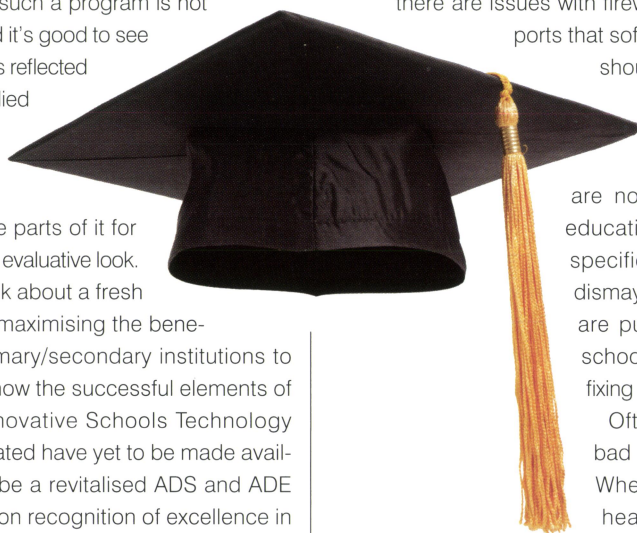
As you would imagine, overhauling such a program is not something you do over a weekend, and it's good to see that the seriousness of the undertaking is reflected in the depth and scope of thinking applied to its resolution. Of course, you may ask why overhaul at all but, when you consider that the original profile had been in place for several years (some parts of it for decades), it's probably worth at least an evaluative look.

Sources close to Apple Australia talk about a fresh approach, with an individual stamp, maximising the benefits of links between tertiary and primary/secondary institutions to increase synergies. Whilst details of how the successful elements of previous strategies such as the Innovative Schools Technology Conference (ITSC) might be incorporated have yet to be made available, the core strategic element will be a revitalised ADS and ADE program. These programs will focus on recognition of excellence in professional development, will probably continue the tradition of external and independent review and, most importantly, have a well-articulated and transparent scheme to reward its members.

The membership will increase, with representation from the tertiary sector and more member schools and individuals.

High expectations will be held for ADSs and ADEs. In the case of ADEs, a "Frequent Flyer" style program whereby the more is put in the more benefit accrues is in development. Presentation at an international conference will earn more points than at a state-based or regional conference.

The upshot of all this is that Apple Australia will gain clear conduits for market intelligence and establish good vehicles for dissemination of all the good work out there. Some of these vehicles will be traditional "courses" where, ITSC-like, technology will be taught with a classroom focus, but others may link to industry where access to "real world" people who use Apple technologies can provide an enterprise framework for such technologies.



## Hot Links

[ali.apple.com](http://ali.apple.com)

The Apple Learning Interchange

[edcommunity.apple.com](http://edcommunity.apple.com)

US education community web site (you need an Apple ID — details on site)

Can you imagine looking at Motion with the guy who prepares graphics for major TV networks, or Final Cut Pro with the girl who edits major movies? Awesome if it comes off.

Further support should come in revitalised web sites. In the UK and US, educational community web sites prevail, and, despite their "pretentious," I'm not sure that they are doing any real good. It's one thing to find lesson plan ideas on web sites such as the Apple Learning Interchange, but day-to-day discussions and exchange of ideas is poorly implemented in a series of clumsy forums.

I've always found it curious that a company that prides itself on technologies such as iChat doesn't use it for collaboration. Admittedly,

there are issues with firewalls, which are set up to reject the ports that software such as iChat uses, but these should be solvable by the judicious use of Virtual Private Networks.

Personally, I'd advise setting up advisories for schools so that they are not prevented from achieving their educational goals by the lack of Apple-specific technical expertise. I'm always dismayed by the positions some teachers are put into where, perhaps at a small school, they face the significant issue of fixing a recalcitrant server in second period.

Often these situations are caused by bad decisions made through ignorance. When the network doesn't work, the head of the P&F gets a Microsoft Certified Systems Engineer off a street corner and we're off to Windows world.

A series of white papers, outlining the issues that need to be taken into account and guidance for future growth, need not be complex. A specified number of Apple Remote Desktop support hours given in with server purchases or to assist with integration into existing networks would benefit enormously.

Then, seamlessly deploying something like iLife '06 becomes possible and you wouldn't want to miss out on that would you?

Seriously, the web-authoring feature of this package alone is worth the money. All that talk of student electronic portfolios sounds like a good idea until you have misspelt filenames, errant image files and similar gremlins. iWeb makes it all possible with a couple of clicks.

That way, the kids can develop professionally as well. ☺

**As an educator, Martin Levins likes empowering people to create using computing technologies.**



## Understand lighting techniques

# Take control of the flash

**T**O capture good photos, you need good lighting. In many cases, this means relying on your camera's flash controls. When used correctly, your camera's onboard flash can perform some of the magic that helps professionals change ordinary snapshots into fascinating photos.

To take advantage of these powers, you'll need to switch out of automatic mode and make smart decisions about your flash photography.

Many beginning digital photographers leave the camera's flash set to automatic mode because they assume that the camera knows best. Even worse, some leave the camera set to the woefully ineffective red-eye mode, which sends out an annoying strobe light before every photo. While these modes generally do a good job of making sure the image has enough light, they don't provide much control. In many cases, you'll get much better results by switching to one of your camera's other flash options: flash on, flash off, or slow-synchro flash.

**Force the flash.** Your camera's flash-on mode is the perfect setting for many outdoor portraits. In automatic mode, your flash usually won't fire outdoors because it thinks there's already enough light to take the picture. It's right — there is enough light. The problem is that the light is usually coming from the wrong direction. Side lighting and top lighting, what we typically see outdoors, tend to make eye sockets dark, noses big, and skin texture rough — not very flattering. Illumination from the front — from your camera's flash for example — evens out those features. Simply cycle through your flash modes until you find Flash On. Make sure you're standing within the flash's effective range,

**Go natural.** Sometimes a soft, natural light better conveys the mood of a situation. To get this effect, turn off your camera's flash.



### Hot Links

[macworld.com/0976](http://macworld.com/0976)

Download the eBook this comes from

## Common flash modes

Here's an overview of the flash options commonly found on digital cameras.

### FLASH MODE

#### Automatic (or auto)

### HOW IT WORKS

The camera activates the flash if — and only if — the light meter determines there is not enough light in the scene.

#### Auto red-eye reduction

A combination of auto and red-eye reduction modes. In this mode, the camera uses red-eye reduction whenever it determines that the flash is required. Please don't use this as your default setting.

#### Flash off

Sometimes the flash destroys the mood of a shot. This mode disables the flash, allowing the camera to make the exposure with only ambient light.

#### Flash on

With this option, sometimes referred to as fill flash, the camera fires the flash with every exposure, regardless of the light-meter reading.

#### Red-eye reduction

The camera tries to reduce the effect of red-eye by shining a light at the subject before the flash goes off. This causes the pupils to constrict, which may — or may not — solve the problem.

#### Slow-synchro flash

Often referred to as nighttime mode, this setting tells your camera to use a slow shutter speed in combination with the flash. This way, it can capture more background detail in dimly lit scenes, such as portraits shot at twilight.

usually about two to three metres, and then take the picture. Your camera will balance the light from the flash with the background, resulting in an evenly lit portrait.

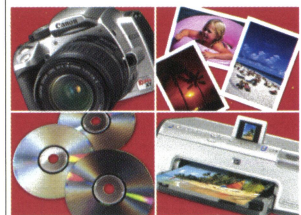
Here's an interesting and attractive variation on this technique: Position your model so the sun is shining on his or her hair from behind or from the side, and then force the flash to fire. This effect, called rim lighting, will give your model a lovely glow.

**Know when to say no.** Much in the same way that turning on the flash improves outdoor portraits, turning it off can help you capture great indoor shots. This technique is especially effective for window-lit portraits (see the illustration "Go natural").

Start by cycling through your flash menu until you find Flash Off. At this setting, your camera records only the ambient light in the room. Steady the camera, take a picture, and review it on your camera's LCD. If your photo looks too "soft" — which is a nice way of saying that it looks too blurry — your camera is shaking slightly during the exposure. You can compensate for camera shake in one of two ways:



## Macworld DIGITAL PHOTOGRAPHY SUPERGUIDE



\$12.95

**By the book.** This article is an excerpt from the Macworld Digital Photography Superguide (2005, Mac Publishing). This 100-page eBook is available as a downloadable PDF (see "Hot links").

**Steady the camera.** Mount the camera on a tripod, compose the shot, and gently press the shutter button. Remind your model, if you have one, to hold very still during the exposure. The tripod steadies the camera and eliminates the shake. You can refine this technique by using the self-timer or a remote release to trip the shutter. That diminishes the possibility of jarring the camera at the beginning of the exposure.

**Increase the ISO.** If you don't have a tripod available, try increasing the ISO speed to 400 or more. You can find the ISO setting in your camera's menu. Hold the camera very steady and gently squeeze off another exposure. You should have a sharper image. The downside to raising the ISO is that you'll likely increase image noise as well, especially with compact cameras. This slight tradeoff is offset by the photo's artistic mood. When you're finished with the session, be sure to return the ISO setting to 100 for your everyday shooting.

No matter which of these methods you use, you must make one more adjustment. When you turn off your camera's flash to capture the natural light of a scene, images sometimes take on a bluish tone. That's because the colour temperature of indoor lighting is different than that of sunshine. Your camera has a hard time adjusting for this change on its own. To compensate, set your camera's white-balance setting to Cloudy. That setting warms up your tones, giving your subjects' skin a healthy glow.

**Get the best of both worlds.** When taking pictures in a nice restaurant or at a wedding reception, I like to capture a little background information in my portraits. Otherwise, you just end up with a flash-illuminated person against a black back-

**Finding your flash.** Before you can use your flash controls, you'll have to find them. If you're lucky, there will be a button control on the back of the camera that allows you to cycle through its options; look for a lightening-bolt icon A. For specialty flash modes, such as Night Snapshot B or Nighttime Flash, as well as other picture modes such as Portrait, Close-up, and Sports, you may need to look in the camera's menu system.



**Get it all.** The default flash mode does a nice job of illuminating the subjects, but the background becomes drab. The slow-synchro flash mode brings the background to life and illuminates the subjects.

ground. The setting could be anywhere. This is when the slow-synchro flash mode (sometimes referred to as Nighttime Flash mode) comes in handy. The camera slows down the shutter speed to capture the mood of the setting; then it fires the flash to expose the subject (see the illustration "Get it all").

The slow-synchro flash setting is sometimes included in the flash mode menu. If you don't see it there, search your camera's shooting modes. Once you've turned it on, make sure you're within flash range, hold the camera very steady, and squeeze the shutter button. The exposure will take a while, so be sure to hold the camera steady for a few seconds, even after the flash has fired.

You'll see quite a difference in your photos. There will be much more information in the background, as with an existing light exposure, but you'll still have a flash-illuminated subject. If you're having trouble getting your subject in sharp focus, use a tripod to steady the camera. This will keep the background from blurring due to camera movement during the exposure.

**Shoot like a pro.** By applying these basic flash techniques, you can capture images that look just like a professional's. As with all photography, it's best to practice a little before the next wedding or celebration you attend. That way you'll have confidence in your shooting when the big event arrives. 📷



By Cyrus Farivar

*Create a video podcast*

## You to the world

WITH a digital video camera and Apple's iMovie HD, anyone with the inclination and the creativity can become a movie producer. Making the movies is only half the battle, though — you also have to find an audience. How? Create a video Podcast. Viewers sign up for your video feed once, and any new movies you create are downloaded to their computers automatically. It doesn't get much easier than that.

Whether you're a budding filmmaker or you're looking to start your own cooking show, creating a video Podcast is a great way to get your productions seen. Thanks to iTunes' built-in Podcasting features, finding and downloading video Podcasts (also known as vlogs, vidcasts, and vodcasts) has never been simpler. In fact, a whole section of the iTunes Music Store is dedicated to video Podcasts. Better still, subscribers with video-capable iPods can enjoy your movies on buses and planes.

**Step 1:** Prepare the footage. You can use any digital video files on your Mac to create a video Podcast. If you want the movie to look good on the iPod's 2.5-inch screen or on the tiny player within iTunes, you'll need to keep a few things in mind as you shoot and edit:

**Get close.** When you're shooting your movie, avoid wide shots with lots of details. Most of these details will be lost on the iPod's small screen. Instead, focus on getting close-up shots of your subject. You should also avoid shooting in wide-screen (16:9) mode; doing so results in black borders above and below your image and makes details appear even smaller. Shoot in standard (4:3) mode instead.

**Think small.** Want to add titles to your movie? Although iMovie includes a nice selection of titling options, most of them are too small to read on the iPod's screen — even at their maximum settings. For more-legible titles, consider investing in GeeThree's Slick Transitions and Effects Volume 3 plug-in (see "Hot links"), which provides a broader range of size options.

If you're willing to forego motion effects, such as scrolling text, you can also create your own titles in a graphics program such as Adobe Photoshop. Create a 200×200-pixel document, design your text, and then import the image into iMovie.

**Keep it short.** Most people don't have the time — or the battery power — to watch a full-length feature film on an iPod, so keep your masterpiece short. A very popular video Podcast, Tiki Bar TV (see "Hot links"), limits episodes to about five minutes. As an added benefit, keeping your video short will save on download time for your viewers and on bandwidth costs for you.



### Hot Links

www.geethree.com  
**Slick Transitions**  
 www.tikibartv.com  
**Popular podcast**  
 www.splashm.com  
**Video converter**  
 www.blogger.com  
**weblog software**  
 www.podcastalley.com  
**Podcast Alley**

Even when scaled down for the iPod, a seven-minute movie can take up as much as 40MB.

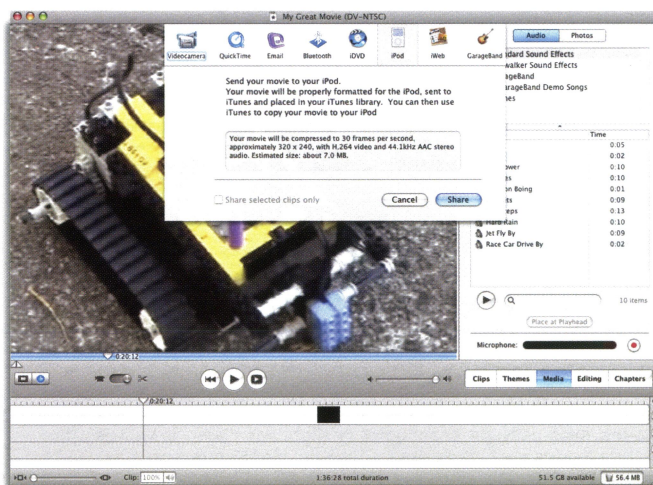
**Step 2:** Compress the file. Before you post the video online, you'll need to optimise it for the video iPod's screen.

With the latest version of iMovie HD (part of Apple's iLife '06 suite), exporting your Podcast is a snap. Go to File: Export, click on the iPod tab, and then click on the Share button (see the screenshot "iPod-bound"). iMovie converts the file and places it in your iTunes library.

If you're using the previous version of iMovie HD (from iLife '05), you need to create a custom preset for the exported file. (The built-in preset has a bug that makes exported movies appear stretched on the iPod's screen.) Go to File: Share, click on the QuickTime tab, and choose Expert Settings from the Compress Movie For pull-down menu. Click on the Share button. In the Save Exported File As dialog box, click on Options. Choose Use Custom Size from the Size menu and type 320 and 240 in the Width and Height fields, respectively. When you click on the Save button, iMovie will export an iPod-compatible version of your movie.

If you don't have iMovie HD, or if you just want to convert finished video files quickly without opening them in iMovie, you can use Splasm Software's Podner (which may have a new name by the time you read this — see "Hot links") to do the same thing.

**iPod-bound.** To export a movie that's compatible with the video iPod, open iMovie HD's Export settings and select the iPod tab.





**Step 3:** Add descriptions. Once the file has been converted, drag it into iTunes (if you're not using the latest version of iMovie HD) and press ⌘-I to open the Get Info window. Click on the Info tab and fill in the Name field (in this case, use the title of your video), Artist field, and so on. All this information will help viewers find your Podcast once they've imported it into iTunes. When you're done, click on OK. Then press ⌘-R to bring up the file in a new Finder window. From here, change the file's name to better reflect its contents — for example, videoPodcast-2006-04-01.m4v.

Although it isn't required, you should also consider adding cover art for your Podcast. This could be a photo, a still from the video, or a simple icon — anything that represents you or your Podcast. The standard cover art size is 150×150 pixels, so don't pick a very large image. Once you've selected your art, use an image editor to crop it into a square. In iTunes, select your Podcast and press ⌘-I. Click on the Artwork tab and then on the Add button. Navigate to your image file and click on Choose.

**Step 4:** Distribute your podcast. You're ready to upload the file to a web server. Many ISPs offer free web space for customers. If yours doesn't, you can usually pay a small fee to have another company host your video files. Got a .Mac account? Just upload the file to your Sites folder.

To make your file easily accessible to others, you need to create an RSS (Really Simple Syndication) feed for it. Think of RSS as your site's PR agent. Anytime you make a new post, this code sends out a summary to RSS news readers, such as the ones built into Safari and iTunes.

**Create a blog.** The easiest way to get an RSS feed is to create a weblog. iWeb, Apple's new web design software (included with iLife '06), makes this process incredibly easy (see the sidebar "Your one-stop weblog"). However, you can use any blogging software to set up your weblog. Blogger (see "Hot links") is particularly easy to set up. It takes about five minutes to create a blog using the on-screen instructions.

Once the blog is up and running, go to [www.feedburner.com](http://www.feedburner.com) to attach video or audio to your posts. Enter your blog's address, select the I Am A Podcaster option, and click on Next. If you use Blogger, your address will look something like this: [myblog.blogspot.com](http://myblog.blogspot.com). On the Welcome page, create a user name and password, and then click on Activate Feed.

On the Congrats page, you'll see the address for your blog's new RSS feed. Write this down — you'll need it later. Click on Next to move to the Set Up Podcast page. Set the Create Podcast Enclosures From Links To menu to Video Files Only, and activate the Include iTunes Podcasting Elements option. Finally, fill in the appropriate information about your Podcast, including a category for its content.

Return to your log and create a new entry. Add a brief message with details about the content of your Podcast, as well as any technical information, such as file size. Then add a link to the video file on your web server. The link will look something like this:

```
<a href="http://www.example_url.com/
example_video_Podcast.m4v">Download my video
Podcast here</a>
```

**Step 5:** Promote your video podcast. You can publicise your Podcast at Podcast Alley (see "Hot links") and the iTunes Music Store.

At Podcast Alley, click on the Add A Podcast link at the top of the page and enter the appropriate information, including the title of the Podcast and the address of the RSS feed you created in FeedBurner.

To promote your video Podcast in iTunes 6, open the iTunes Music Store and select Podcasts from the menu on the left. When the Podcast page appears, click on Submit A Podcast. Enter the address of the RSS feed you created in FeedBurner in the Podcast Feed URL text box. Your new podcast should be up on iTunes within a day or two. When it is, people can search for it from within iTunes.

## Your one-stop weblog

iWeb, the newest member of Apple's iLife, greatly simplifies the process of creating and distributing a video podcast.

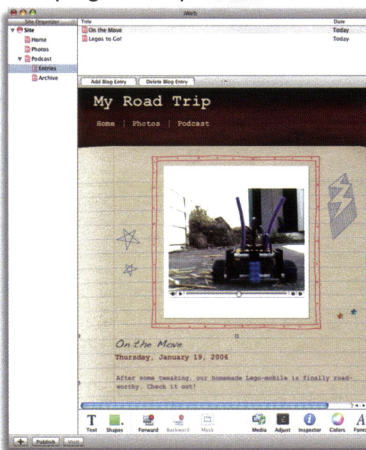
When you launch iWeb, select a podcast page from any of the template styles. When you use this type of page, iWeb automatically retrieves your podcast and creates an RSS feed for it.

If you're using iMovie to edit your podcast, go to File: Export, click on the iWeb icon, and then click on the Share button.

iMovie will send it to iWeb for publication. Add your own text to the iWeb layout, including a title, show notes, and credits.

Then go to File: Submit Podcast To iTunes to list your podcast in the iTunes Music Store's Podcast directory. Fill out the appropriate information, and then click on the Publish And Submit button to upload your podcast to your .Mac account.

If you don't have a .Mac account, don't despair. You can publish your iWeb pages, including video Podcasts and RSS information, to any web server. From the File menu, select Publish To Folder. iWeb places all the necessary files within your user folder's Sites folder. From there, you can use any FTP program to upload them to the host of your choosing.



You will lose a few features by not publishing to .Mac — namely, the automatic listing in iTunes and photo slide shows — but for the most part, the pages will be identical.

**Publish this.** iWeb's built-in Podcasting features make publishing your video Podcasts easy.



By Tom Negrino

## Beat e-mail hassles

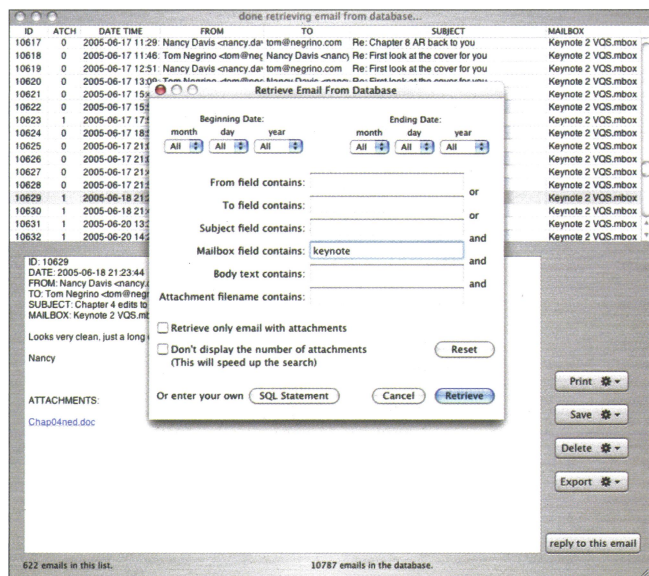
## Post fixes

THESE days, e-mail is so essential to the way we work that even the slightest disturbance in the flow of messages can ruin your day. You don't have to put up with a cluttered, creaking inbox or attachments you just can't seem to send. Here's how to deal with common pet peeves.

**E-mail anywhere.** *When I'm on the road, I can't send e-mail messages through my regular internet service provider. Is there a service I can use that will let me send e-mail from the road?*

To fight spammers, many ISPs prevent you from sending mail through their outgoing mail server if your computer isn't connected to their network. One way to get around this is to pay an e-mail relay service — such as SMTP.com, DynDNS.com, or DNSExit.com — for the use of its outbound mail server when you're travelling. You can use any e-mail program or device, and mail appears to come from your usual e-mail account. Relay services also allow you to get around networks that block traffic on port 25 (the normal outgoing mail port), by supplying an alternative outgoing mail port. Prices vary, but most relay services cost between \$US15 and \$US30 per year.

If you have a free Google Gmail (see "Hot links") account, your other option is to configure it so mail sent from it uses your regular From e-mail address. Then you can send e-mail from any



## Hot Links

[www.gmail.com](http://www.gmail.com)  
Free Google mail  
[mailplus.mail.yahoo.com](mailto:mailplus.mail.yahoo.com)  
Non-free Yahoo! mail  
[www.mailsteward.com](http://www.mailsteward.com)  
[www.mothsoftware.com](http://www.mothsoftware.com)  
[www.manybases.com](http://www.manybases.com)  
Mail archivers  
[www.getthunderbird.com](http://www.getthunderbird.com)  
Thunderbird, from the makers of Firefox  
[www.cosmicsoft.net/emlxconvert.html](http://www.cosmicsoft.net/emlxconvert.html)  
Convert Apple Mail messages to .mbox format

web browser. The \$US20 per year Yahoo Mail Plus (see "Hot links") also offers this option.

**Clean out your inbox.** *My inbox has more than 7000 messages in it. This is making my e-mail program act strangely, but I hate to delete anything. Is there a good way to archive these messages so I can still search them?*

Too many messages in a single folder can often cause an e-mail program to act sluggishly. One way to remedy this is to try an e-mail archiving program (see the screenshot "Search your past"), which work with most Mac mail programs, including Apple's Mail, Microsoft Entourage, and any other program that can export standard .mbox files.

These programs allow you to take older messages out of your main e-mail program, but still quickly search the archives when

## The miser's archive

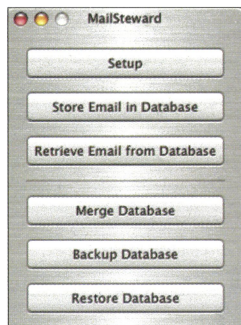
Sure, archiving utilities are fast and convenient, but you don't have to pay for one to solve e-mail overload. Instead, stash old messages in a free e-mail client. (I prefer Mozilla Thunderbird — see "Hot links").

Most e-mail clients save messages in the standard .mbox format. But Apple's Mail doesn't. To convert Mail 2.0 messages, use CosmicSoft's emlx to mbox Converter (see "Hot links"). Launch the utility and Mail 2.0. Select a Mail mailbox to archive, and drag it to the desktop. Open the mailbox (it's actually an mbox folder) and then open the Messages folder inside to reveal the messages (.emlx files) within. Select and drag them to emlx to mbox Converter's window to add the files to the utility's list. Click on Save Mbox.

Download Thunderbird and create a user account. Quit the program and travel to /your user folder/Library/Thunderbird/Profiles/defaultprofile/Mail/Local Folders. Open the mbox folder created by emlx to mbox Converter and drag its .mbox file with your old messages to this Local Folders folder. Launch Thunderbird and select the Archived entry in Thunderbird's Folders list. — Christopher Breen







**Search your past.** Tired of a cluttered inbox, but loath to let go of old messages that might come in handy? MailSteward makes it easy to archive and retrieve messages from Mail, Entourage, and most other e-mail programs. Better yet, you can do blazingly fast searches on one or more of your archived messages' attributes.

you need access to your old mail. Check out Pubblog's MailSteward 3.8, Moth Software's Mail Archiver X, and ManyBases' FastMailBase (see "Hot links" for all of these). You can download demo versions of all these programs to see which works best for you. If you're feeling frugal, check out the sidebar "The miser's archive" for another archiving idea.

Deflate ever-expanding attachments. When I include a large attachment with an e-mail message, I always make sure the attachment is small enough to fit through the e-mail gateway of my recipient. When I try to send it, though, the attachment becomes so large that the recipient's ISP rejects it. Why does the attachment get bigger?

Attachments expand because your e-mail program encodes them in a text-only format for sending over the internet. Examples of these formats are MIME and AppleDouble. Normally, recipients' e-mail programs automatically decode files back into the original format, but if the messages are too big, some ISPs might refuse to accept them.

One solution (other than sending smaller files) is to compress the file before you attach it to your e-mail message. Just select the file in the Finder and then choose File: Create Archive Of file name. The Finder will create a ZIP archive, which will almost always be considerably smaller than the original file. Send the ZIP archive.

Check the archive file's size; if it's close to the maximum size the mail gateway will accept, it may bounce (because the archive file will grow in size when it's MIME encoded). In that event, you should try to break the file into smaller pieces, or use another way to deliver the file, such as putting it on a shared iDisk for the person to download.

**Avoid e-mail scams.** *I get a lot of e-mail messages from companies claiming to be PayPal or my bank and requesting my personal information. How can I tell which ones are legitimate and which aren't?*

It's best to assume that none of those e-mail messages are legitimate, and are instead the work of phishers — scam artists who specialise in sending messages that look genuine but that really take you to a web site masquerading as your bank or another service. Their purpose is to fool you into entering user names, passwords and financial information. The scammers can then log into your real financial accounts and clean them out.

Legitimate companies never ask for personal or financial information via e-mail. At the most, they might ask, for instance, that

you log on to the company site to update an expiring credit card, but they won't include a link to the site in the e-mail message.

Here are a few things you can do to make yourself a difficult target for phishers: be wary of any e-mail message that asks you to update your user information; it's probably bogus. Phishing messages often have spelling errors, or tell you that you must update your account immediately or the company will close it (real commercial enterprises aren't so keen to get rid of customers).

Never click on a link in an e-mail to get to your financial institution; always open a new browser window and type the web address manually. Phishers use HTML e-mail to create fake links that look as though they're taking you to a legitimate address but that actually direct you somewhere else. If you view the e-mail as plain text (in Mail, choose View: Message: Raw Source), you can spot the link's real destination. For example, one phishing mail I received — purportedly from Amazon.com — offered this link: <http://www.amazon.com/exec/obidos/account-access-login/ref=/index<http://211.233.38.86/~park/amazon.html>>. The address inside the angle brackets reveals that the source isn't Amazon at all. Finally, legitimate e-mail messages from companies such as PayPal will address you by your user name. If the message says something like "Dear valued PayPal member," it's a fake. 🐱

## Three great Gmail tips

Free e-mail services, such as Google's Gmail or Yahoo Mail, can take some stress off your regular mail program, and allow you to do things that are otherwise difficult. I prefer Gmail because it gives me a lot of storage capacity — 2.5GB at press time — without requiring extra fees.

1. **Search mailing lists fast.** I'm signed up for several mailing lists that include useful information I'd like to keep for reference. I created a new Gmail address just for lists so I can search through the messages using the familiar and fast Google search engine.
2. **View incoming e-mail anywhere.** Microsoft Entourage runs all the time on my office Mac, but I often want to check new mail from home. I set up an Entourage mail rule that automatically redirects all my incoming e-mail to my Gmail account. (Redirected mail looks like mail from the original sender, as opposed to forwarded mail, which appears to come from the forwarding address.) This means that I can log into my Gmail account from any Net-connected computer, Mac or Windows, and see all the mail that came into Entourage at the office. Also, Gmail can use any of your e-mail addresses in the From field, which means I can reply to messages without letting my correspondents know that I'm not in the office.
3. **Share an e-mail account.** Sometimes I write books with my wife, and our books have an e-mail address for reader questions and comments. We automatically forward those messages to a Gmail account that we share. That way both of us see all the reader mail, and either of us can answer it.





*Use the Terminal safely*

## Command-line lifesavers

If you're new to the command line, you've probably heard horror stories about people who've erased all their files with one command. Even if you're a Terminal veteran, you've undoubtedly had a few brushes with disaster. When you work with the command line, you work without a safety net – there's no Trash to fish files out of and no Undo command. There are some tricks for protecting yourself from missteps.

**The erasers.** Terminal is an amazingly efficient tool for deleting, moving, and copying files. One slip-up when you use these commands, though, and your files are gone forever.

**rm.** Perhaps the most hazardous of commands is `rm`, the remove command. Omit a character or press return just a bit too quickly, and you can wipe out the wrong file, an entire folder full of files, or an entire hard drive.

Say you want to delete a file called `Report` from your desktop. You'd run the `rm` command, like so:

```
rm~/Desktop/Report
```

Now say you have several files with names such as `Report2005`, `Report2004`, `Report2003`, and `Report2002`, and you want to delete the oldest one, using the command `rm~/Desktop/Report2002`. Oops! – your fingers slip, your coffee spills, or your cat scratches you, and you accidentally type `Report2004` and press return. You'd better have a backup, because `Report2004` is now an `ex` file.

That's not even the worst mistake you can make when you're using `rm`. When you reference file and folder names made up of multiple words, Unix requires that you use either quotation marks (`rm~/Desktop/"Report2002"`) or a backslash (`rm~/ Desktop/Report\2002`) to indicate that both words are part of the name. I recommend using quotation marks because it's very easy to forget that backslash. For example, if you wanted to delete a file named `Report 2002`, you might accidentally type this: `rm ~/Desktop/Report 2002`

Unfortunately, since you omitted the backslash, the `rm` command thinks that you're telling it to delete two items, one called `Report` and the other called `2002`. If you have a file named `Report`, it's now gone without a trace.

**cp and mv.** The `cp` command is Terminal's equivalent of dragging a file in the Finder to another volume, or option-dragging a file (or selecting `File: Duplicate`) to copy it to a different location. Likewise, you use the `mv` command to move files from one place to another, much as you would drag a file to a different folder.

You run both the `cp` and `mv` commands like this: `command source destination`



### Hot Links

[macworld.com/1110](http://macworld.com/1110)

Creating a `.bash` profile with TextWrangler

The source can be one file or several files. The destination can be a single file or a directory (folder) – for example: `cp Report2002 ~/Documents/Archives`

Here I've copied the `Report2002` file from the current working directory to the `Archives` directory in my `Documents` folder. If you want to change the file's name – to `Report2002_copy`, for instance – when you copy it, you can run this command:

```
cp Report2002 ~/Documents/Archives/
Report2002_copy
```

The danger of the `cp` command is not just that it replaces any existing file with the same name, but that it does so without warning you. So in the first example, if you already had a file in `/Documents/ Archives` called `Report 2002`, the `cp` command would simply overwrite that file with the new one. The Finder would warn you that you were about to replace an existing file, but Terminal assumes that you know what you're doing.

**Safety measures.** Fortunately, the Unix founders foresaw the possibility that we users might get sleepy, distracted, or spaced out, and they added the `-i`, or interactive, option to give us a chance to prevent these mistakes. Even seasoned command-line mavens use the `-i` option to protect themselves from harmful typos. To use this option, add it to a command like this: `rm -i Report2002`

Now Terminal will display a message – “remove `Report2002`?” – asking whether you're sure you want to remove the file. You must type `yes`, or simply `y`, before the `rm`

command does its work. If, however, you type anything else, such as `no` or `n`, or simply press return, you cancel the operation.

Both `cp` and `mv` also offer the interactive option, and using it whenever possible is a good idea. When you use this option, Terminal displays the following message if your command is going to replace an existing file: “overwrite file name and path? (y/n [n])”. Press return to select the default answer, which is `no`. Type `y` or `yes` to tell Terminal to overwrite the file.

**Add automatic protection.** If you know you're forgetful, set up Terminal to use the interactive option automatically whenever you invoke `rm`, `cp`, or `mv`.

To do this, you must create a shell alias. Your shell (`bash`, by default) is the program that runs in Terminal whenever you launch the application. A shell alias is nothing like a Finder alias. Rather, it's a way of having one Unix command run another one.

You need to add your alias in the `.bash_profile` file in your Home folder. If you don't already have such a file, use your favourite plain-text editor to create a file with that name (see “Hot links” for





tips on using Bare Bones Software's free TextWrangler). Add the following lines:

```
alias rm='rm -i'
alias cp='cp -i'
alias mv='mv -i'
```

When you save the file, the Finder will warn you that you're creating an invisible file. To proceed, click on the Use "." button.

Essentially, you've created shortcuts for all these commands. Every time you type the mv command in Terminal, for example, no matter how complex the actual command is, the shell will run that command with the safer -i option, helping you avoid any unwanted deletion or overwriting. If there comes a time when you're sure you want to nuke a lot of files, you can run any command in the normal manner, without answering Terminal's questions for each one. To make Terminal ignore any alias you've set, run the rm command, for example, as follows: \rm file

The backslash tells the shell to use the real command, not its alias.

**The redirection of no return.** When the output of a command is long, or when you want to save it to review later, it's convenient to save the output to a file instead of displaying it in Terminal. You do this by using the redirection character, >, followed by a space and then the destination file's name.

For example, I can use the sort command to sort a list of phone numbers in a file, and then save the results in a file

called sorted\_phone.txt: sortphone.txt> sorted\_phone.txt

You can run into problems if you forget to give your output file a new name. Overlook this simple step, and you'll lose the original file.

**Safety measures.** Since redirecting output is such a common action (you may use it when you parse log files or run complex find commands), the Unix folk created a special variable, aptly named noclobber, that you can set in your shell. With this variable in place, Terminal will prevent you from overwriting files when you use the redirection character.

All you have to do is open your .bash\_profile file and add one line: set -o noclobber

Now, when you redirect output with the > character, you'll see this error message: "cannot overwrite existing file." This will save you from losing the original redirected data, or any other files with the same names as those you've chosen for redirection. All you need to do then is run your command again, renaming the output file, to save the output.

**Play it safe.** While the command line is a powerful way to perform many operations quickly and efficiently, Terminal does not warn you about the most common errors you can make. These simple protective measures can save your time, your files, and your peace of mind. ☞

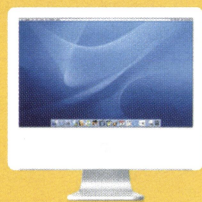


# Get Your Macs Retailing with POS•IM

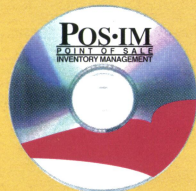
*"Robust and adaptable...POS•IM edges out in front when it comes to hitting the ground running and (providing) flexibility for your needs."*

  
Australian MacWorld 08.2003

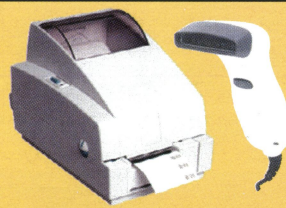
Includes  
Rentals  
Module  
+  
Grids/Style  
Row &  
Colour



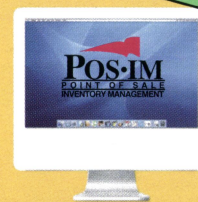
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By Sean McNamara.

## Help folder

### We answer our readers' questions

Each month Channelworx (1300 883 882) gives a copy of Dantz Retrospect Desktop (valued at \$259) to the Australian Macworld reader who submits the most intriguing Help folder query.

Retrospect Desktop is the #1 home and small office backup software for Macintosh. Don't rely on manual drag-and-drop to protect your data — it misses important files, is performed sporadically at best, and cannot restore older or deleted files. Retrospect allows you to easily set up complete, scheduled backups of three networked Macintosh, Windows, or Red Hat Linux desktop and notebook computers. Client licenses are available to protect additional computers. The product CD contains both Retrospect 6.0 for backing up to Mac OS X (10.1.5 through 10.3 "Panther") and Retrospect 5.1 for backing up to Mac OS 9.

Send your query to [matthew.powell@niche.com.au](mailto:matthew.powell@niche.com.au) for consideration for Help folder. Include your full mailing address to be eligible to win Retrospect Desktop.

All queries and solutions are the sole property of Niche Media.

■ Sean McNamara is a Sydney-based consultant trading as MacAssist.



### Hot Links

[www.channelworx.com.au](http://www.channelworx.com.au)  
Query of the month sponsor  
[www.microsoft.com/mac](http://www.microsoft.com/mac)  
Tip of the month sponsor

[www.versiontracker.com/dyn/moreinfo/macosx/16484](http://www.versiontracker.com/dyn/moreinfo/macosx/16484)  
BirthdayCal  
[www.versiontracker.com/dyn/moreinfo/macosx/25771](http://www.versiontracker.com/dyn/moreinfo/macosx/25771)  
BirthdayBook  
[docs.info.apple.com/article.html?artnum=14449](http://docs.info.apple.com/article.html?artnum=14449)  
KnowledgeBase on resetting the PMU  
[www.apple.com/support/downloads/finalcutexpresshd301.html](http://www.apple.com/support/downloads/finalcutexpresshd301.html)  
Final Cut Express updates  
[discussions.apple.com/thread.jspa?messageID=1565107](http://discussions.apple.com/thread.jspa?messageID=1565107)  
Hacking FCE

# 1

■ What a terrific little link up. Add the birthday to the Address Book and it places it in an iCal calendar. I'll never forget another birthday. Or so I thought. Why doesn't iCal let you set an alarm to remind you that you're about to land neck deep in the land of forgotten family birthdays?

Andrew Cherry  
via internet

This is a new feature of iCal in Tiger, Andrew, and, as such, may be lacking fully useful functionality. I imagine your lament will be echoed by many — I would think that at some stage Apple will allow for the setting of at least a default Birthday alarm to prevent forgotten birthdays.

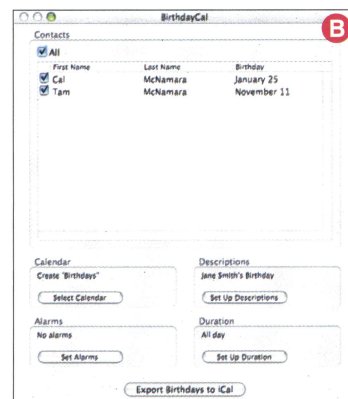
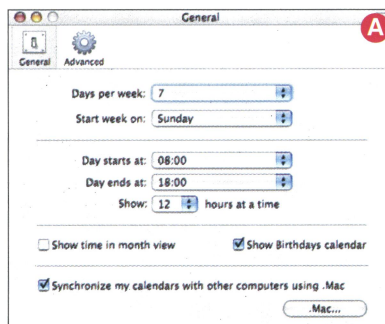
To turn this feature on, turn on the "Show Birthdays calendar" option in the General section of the iCal preferences **A** — this will create a calendar called Birthdays which will reflect the contents of the Birthday field of your Address Book cards.

For users of Mac OS X v10.3 or earlier, check out BirthdayCal (see "Hot links"), a freeware utility which performs much the same task, but has

added functionality of alarms, event duration and the format of the event's title **B** — unfortunately, the current version doesn't work with the Tiger version of iCal.

Another freeware utility, BirthdayBook (see "Hot links") maintains its own database and has its own notification system built-in, and you can customise its behaviour fairly extensively — it also allows you to import the birthday entries from the address book or an iCal calendar, or to export the list of birthdays to iCal (this export functionality seems broken in Tiger). Although the layout and some of the phrasing in the program is a little twee, it seems to provide adequate functionality.

So, until Apple provides the ability to set alarms for birthdays, you'll have to rely on a third-party solution. Of course, you have a part to play in Apple adding this functionality — choose "Provide iCal Feedback" in the iCal menu and submit a request for this feature. If enough people ask, I'm sure Apple will provide.





## 2

■ The other day whilst pruning my iPhoto library, my iBook G4 suddenly shut down. There was absolutely no warning, the power was connected so not a battery issue, and I did not see any error messages. The console log gives me no indication of what may have caused the problem. It was a hot afternoon but the laptop is propped up about an inch to give airflow and a better typing position. The case was not notably warmer than usual and the fan was not running. The pruning was gradually taking longer but I don't think this shutdown is connected to iPhoto in any way.

Later the same afternoon it did it again only this time the iBook was put to sleep and when I came back it had shut down. Other times it has happened while the machine was asleep. There is never any indication that it is about to happen (that I have seen).

Can you give me some clues as to whether it may be software or hardware related? I'm running OS X 10.3.7.

*Jonathan Rihan  
Stanthorpe, Qld*

What you describe could be either hardware or software, so let's start looking at some of the procedures to track the problem.

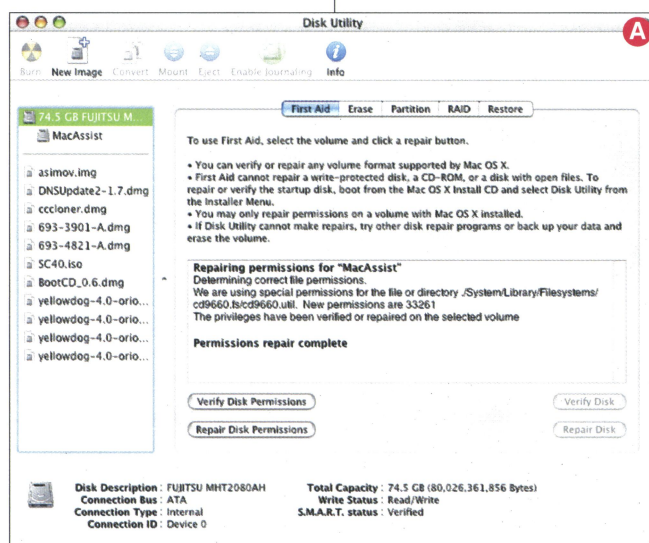
Looking in logs through the Console application is a great start — you should especially check out the system.log file, as it often displays more information than the console.log file. In both

Panther and Tiger, open the Console application, then click on the Logs toolbar button to see the list of log files. Click on the system.log entry and review the entries for the times when the machine shut down. I've seen repeated entries in an iMac G5's system.log complaining about overheating in the CPU and the machine just goes to sleep, but these messages weren't in the console.log file.

Next, I would recommend running Software Update to get your machine up to Mac OS X v10.3.9 (and any of the other available updates) — it's a long shot that this will clear the problem up, but I think it's worth doing if only to get the benefits of the other fixes included in those updates. I'd also run the Disk Utility from the original install disk to repair permissions and to repair the disk **A**. Re-installing the OS should be a last resort — make sure you do an Archive and

Install, setting the Preserve Users and Network settings option so you don't lose your settings and documents. Likewise, upgrading to Tiger when it's so unclear as to whether the problem is a hardware or software issue is not something to jump into lightly as it might not solve the problem (although you might benefit from Tiger's new features).

I'd also reset the PMU (see "Hot links" to find instructions for different laptops). Running the Hardware Test disk which came with the machine may also signal a problem. If it doesn't signal a problem, it doesn't rule out hardware as the cause, as I've seen machines with known hardware problems pass these tests, but if it doesn't pass, it definitely has a hardware problem, which will be detailed in the results.



## 3

■ I have a problem getting Final Cut Express 2 to run on my iMac G5 computer. The program installed OK but when I tried to run the program, it comes up with the error "AGP Graphics Card cannot be found". I know that the iMac G5 has a ATI Radeon Graphics Card, so is this the problem?

Is there any way of getting around this problem? The program used to run, without a problem, on my PowerBook G4 laptop. Would upgrading to Final Cut Express HD resolve this problem?

*Terry Tozer  
Toowoomba, Qld*

The problem you're experiencing is not because of the fact you have an ATI Radeon card, Terry, as some of those cards are AGP and later ones are PCI Express. Final Cut Express originally was made to support AGP.

As PCI Express has become the graphics card standard, newer machines were seen by Final Cut Express as incompatible. There is an update to Final Cut Express v3 to allow it to work on these later machines (see "Hot links").

As for Final Cut Express v2 (make sure you have upgraded to v2.0.3 (see "Hot links"), you may have luck if you follow the instructions on the Apple Discussions area for modifying the Final Cut Express application to accept PCI-based graphics cards (see "Hot links").



By Sean McNamara.

## Beginners start here

### Users and Groups

■ Last issue we covered some basics of Users in Mac OS X — this time, we're looking at adding Users to a Mac OS X system. I'm assuming Mac OS X v10.4 (Tiger) — as you go back through the versions, things change more and more but Mac OS X v10.3 (Panther) is quite similar for those readers still using that version, and, where notable, I'll mention the Panther changes as we go.

Most of the settings for users in Mac OS X can be found in the Accounts System Preferences pane **A**. Adding a user is as simple as clicking the button with the plus sign on it — a sheet comes down from the top of the window for adding the new user's details **B** — in Panther, the details are entered in the main window, rather than on a sheet.

The first piece of information to enter is the user's name (usually their full name). Next is the shortname, which is basically the Unix username, and the name used for the user's home folder. By default, Mac OS X takes the user's

name from the first field, removes all non-alphanumeric characters and spaces, and converts it to lower case.

As an aside, I've noticed people find it easier to type in their first name in lower case rather than both their first and last names in lowercase with no space in between (the habit of "properly" typing their names being so ingrained) — for this reason, I usually shorten the shortname to just the user's first name in lower case.

The next piece of information to enter is the user's password — this has to be entered twice to confirm it's being typed in correctly (if you only had to type it in once, and you made a mistake, you wouldn't necessarily know what the password was set to). The little key button next to the password opens the Password Assistant, which can help you to determine the strength of a user's password, or to have a password of suitable length and style suggested to you. You can also choose to enter a password hint in case the user forgets their password — this is considered in security circles to be a bad thing, as it may allow someone else to guess the password when attempting to login as that user.

Finally, you get to decide whether to make this user an admin user of the computer (this setting is available in the Security sub-pane of the Accounts System Preferences pane in Panther, rather than in the initial setup screen for a user). You must have at least one admin user on your machine, and the user set up the first time Mac OS X is run is

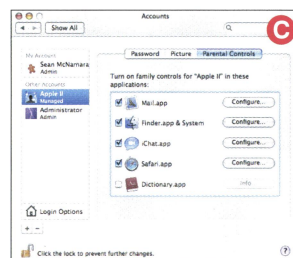
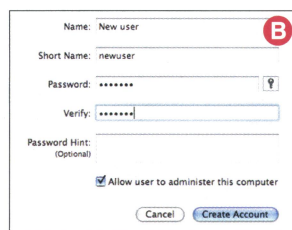
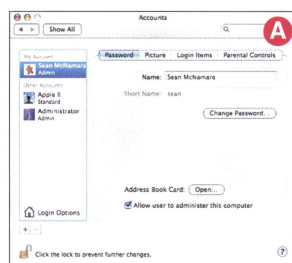
set as an admin user by default. Admin users are allowed to install software into the Applications folder, perform system updates through the Software Update functionality, and install fonts and browser plug-ins for all users. They can also change other users' settings (including other admin users' passwords), so it pays to be aware of the increased power these users have. With the ability to perform actions as the root user (sometimes known as the super-user) through the sudo command, admin users have almost unlimited control over a machine — using the sudo command it's even possible to delete parts of a working system to make it non-functional.

Once all the user's details are entered, click "Create Account" and the user will be added to the list of users in the Accounts System Preferences pane. At this point you can assign a picture to the user in the Picture sub-pane (you can even take a picture with an iSight camera or drag photo files onto the current picture to replace it).

You can also assign Parental Controls on non-admin users — this would allow parents to vet the list of e-mail correspondents, iChat buddies, allowable web sites,

and whether the Dictionary application will prevent the looking up of profanities. The Finder and general Mac OS X behaviour can also be modified to allow only certain applications to be open, or to limit the functionality of the Finder by setting it to Simple Finder mode **C**. These sorts of controls may be especially useful with young children or in school/lab situations.

That covers the basics of adding users to Mac OS X — next time, we'll look at how to log in as different users.



## Microsoft Reader tip

■ At Tiger's login screen click on the computer name to change it to system version, IP address, serial number, network user availability or the current time.

Greg Stewart  
Merbein, Vic.

Each month, Microsoft gives a free Notebook Optical Mouse valued at \$70 to the Australian Macworld reader who submits the best tip. Sized for mobility and designed to be noticed, Microsoft Notebook Optical Mouse 3000 offers great comfort for either hand and is always good to go. E-mail your tip, together with your name, address and phone number, to [matthew.powell@niche.com.au](mailto:matthew.powell@niche.com.au). All reader tips published become the sole property of Niche Media.

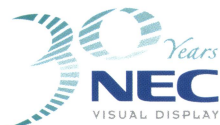




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# The Final Cut is the deepest

OVER the next two issues we'll be taking a look at books at dealing with Apple's Final Cut Studio software — Final Cut Pro, DVD Studio Pro, Motion and Soundtrack — focusing particularly on titles from the Apple Pro Training Series. Complete the course material in this series, take the certification exam at an Apple Authorised Training Centre and you can become an Apple Pro (see "Hot links").

## DVD Studio Pro 4 — Authoring Professional DVDs

by master trainers Martin Sitter and Adrian Ramseier is a hands-on course that demonstrates, with practical lessons, the best ways to author a project with DVD Studio Pro. The 700-page, full-colour book comes with all the media and project files you need on the accompanying DVD. Pop the disk into your Mac and you get a menu showing three of the four projects you will be working on. If you click through the interface of each you'll quickly get an idea of where you're headed.

The first project is a simple DVD for a wildlife documentary, *Tiger*, with a movie, slideshows, and two basic menus. This is preceded by some basic information on the rudimentary steps of DVD authoring and the requirements of the DVD-video specification. In this project you'll use Studio Pro's basic interface view, which is a comfortable transition from iDVD. Next you will build a more sophisticated DVD on Swiss tourism and learn more about the basic functions of DVD Studio Pro.

The two following projects — a documentary on the making of *Tiger*, and *Black Box*, a creative design gallery — are successively more complex, building on the basic techniques and structure introduced in the first projects. Three appendixes focus specifically on motion menus, bit budgeting and Final Cut Studio workflows.

Each chapter opens with a list of the lesson files you will need from the disk, the anticipated lesson time and the specific goals for the lesson. Each chapter ends with review questions and answers. Building the course around four projects instead of one asks you to repeat and reinforce the same basic tasks on every DVD.

If you're itching to break free from iDVD this title, with its refined pedagogy and generous illustrations, could turn you into a DVD Pro.

**Final Cut Pro 5** by FCP artiste Diana Weynand is a companion volume to the preceding title. Expect the same chapter introductions and reviews and high-quality full-colour graphics. The instructional design framework is also similar as each lesson builds on the preceding and progressively steps you up through FCP's functions and capabilities.



### Hot Links

[www.apple.com/software/pro/training](http://www.apple.com/software/pro/training)  
Final Cut training

Most lessons include Project Practice, which gives you an opportunity to stop and master what you've learnt before moving on to new material. Absolute beginners are fine but if you already have some FCP experience Weynand urges you to dive in wherever you will. The companion DVD contains three sets of footage — documentary material on Native Americans, motocross racing and a music video — as well as all the

other project materials you will need for the lessons.

The course is designed to get you up and running with basic editing and trimming functions, then moving into a broad overview of how to customise the program for your particular purposes before final sections covering advanced features such as FX, titling and output. FCP is a complex piece of software with seemingly endless capabilities. There are no shortcuts. The meticulously detailed approach taken in this title is a safe path to success.

**Final Cut Pro for Mac OS X**, in the *Visual QuickPro Guide* series, provides you with an alternative to the preceding title — if you have the capability to provide your own video footage. At over 750 pages, amply illustrated in black-and-white it also has an extra 100 pages of information. But as author Lisa Brenneis advises, you'll need to be an intermediate or advanced Mac user with some basic knowledge of video editing procedures. If that's not you, she recommends a workout in iMovie or Final Cut Express first. The book describes the operation of FCP 5, but she claims much of the book should be a useful guide for users of version 2, 3, 4 or HD.

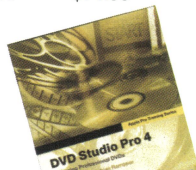
The first part is a quick feature overview with setup details and FCP's project structure. The next sections cover capturing, importing and organising media in preparation for editing, which you will do in section 4. Section 5 does special effects, compositing, filters and titles while the last section covers output and project management. Appendixes contain online resources and keyboard shortcuts.

Although both cover much the same ground, the major difference between the two FCP titles is that this one spends more time showing you how FCP

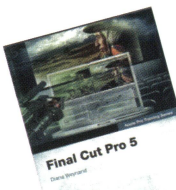
thinks, its quirks and its special requirements. If you're intending to develop a long-time relationship with Final Cut Pro this feature could save you a lot of time and effort down the track. 🐘

**Keith has been a Mac addict since 1984 and still can't fathom why there is anyone who isn't.**

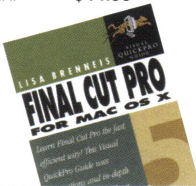
Title **DVD Studio Pro 4 — Authoring Professional DVDs**  
Author **Martin Sitter and Adrian Ramseier**  
Publisher **Peachpit Press**  
ISBN **0321334825**  
RRP **\$74.95**



Title **Final Cut Pro 5**  
Author **Diana Weynand**  
Publisher **Peachpit Press**  
ISBN **0321334817**  
RRP **\$69.95**



Title **Final Cut Pro for Mac OS X — Visual QuickPro Guide**  
Author **Lisa Brenneis**  
Publisher **Peachpit Press**  
ISBN **0321350251**  
RRP **\$44.95**





# 2006 Apple Computers

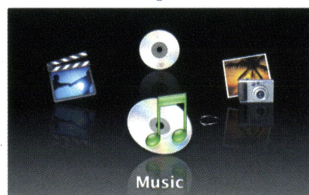
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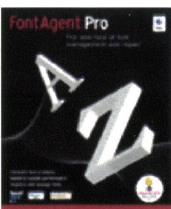
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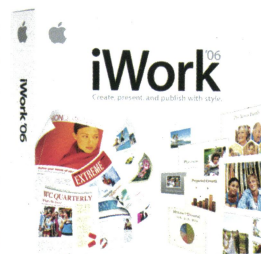
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Adobe® Creative Suite 2 Pr from CS1	\$899	Adobe® Type Manager Del OS9 Mac	\$119	Macromedia® Director (from 8.5+)	\$599	Stuffit Deluxe	\$ 59
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## Ratings key

Outstanding



Very good



Good



Flawed



Unacceptable



Dangerous



## AMW lab: giant LCD monitors

*Size does matter*

**W**HEN AMW Lab was asked to look at the 30" Apple Cinema Display (ACD30), along with some competitive models from other vendors, we also had to borrow a late model PowerMac G5 with "dual-link DVI" support on its graphics card. Although the ACD30 can be driven by an ordinary DVI-equipped Macintosh, it would be a pointless exercise. Only a dual-link DVI card can deliver the whopping 2560x1600-pixel resolution that the ACD30 is capable of displaying.

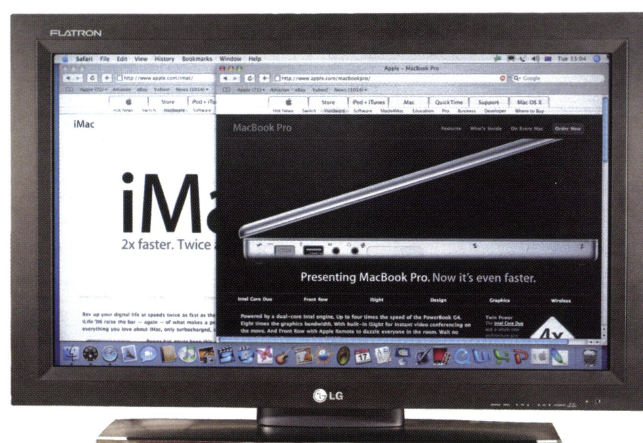
To get some idea of what it is like the first time you sit in front of one of these puppies, visit your local cinema and sit in the very front row. This display is so big that the outer edges are almost outside your field of direct vision and you actually notice yourself turning your head slightly as you aim your mouse pointer at the Apple icon way up there in the far distant top left corner. That's another thing you need to adjust – mouse tracking speed. With this much real estate to cover you need to buy some sprint shoes for the rodent, but even at maximum it will still take a few full-desk swipes to travel across the whole screen.

Why would you want something this big? According to Apple, this display is designed for professional users who need massive screen space for desktop publishing, video and audio work, and of course, graphics. If you live inside Adobe's Creative Suite, or Apple's FinalCut Pro HD, then you already know what you'd do with this sort of real estate. For example, you can have a double-page spread of an A4 magazine open inside InDesign and you can clearly read and edit the text, even at 8.5 points, without zooming. It has never before been this easy to see the knock-on effect of text changes across several pages.

Audio editors will also appreciate being able to view multiple tracks at once, as well as having easy access to palettes without having to hide or move windows around. Photoshop mavens will be able to edit individual pixels. If video editing is your bag, Apple would like you to buy two of these monsters, one for editing and all the effects palettes you can possibly imagine, and another one alongside as your preview device, instead of drag-

# Test drive.

We evaluate, rigorously test and give detailed assessments of new-release software and hardware.





	30-inch Apple Cinema HD Display	3007WFP 30" Digital LCD Monitor	LCD3210 32" MultiSync LCD Monitor
■ Type	Huge LCD monitor		
■ Rating	★★★★½	★★★★	★★★★
■ Pros	Huge screen real estate	Huge screen real estate, memory card reader	Multiple input sources
■ Cons	Requires dual-link DVI graphics card	Requires dual-link DVI graphics card	Not designed for desktop use
■ Ports	DVI, USB, Firewire	DVI, USB, memory cards	DVI, VGA, RGB composite and component
■ Street Price	\$3925	\$2899	\$3199
■ Manufacturer	Apple Computer	Dell	NEC
■ Distributor	Apple Australia 133 622	Dell Australia 1800 812 393	NEC Australia 131 632
■ Reviewer	Ian Yates		
■ Hot links	<a href="http://www.apple.com/au">www.apple.com/au</a>	Hot links <a href="http://www.dell.com.au">www.dell.com.au</a>	Hot links <a href="http://www.nec.com.au">www.nec.com.au</a>



ging a broadcast quality HD monitor onto the desk. Apple would like you to pay \$3999 for an ACD30, so as always, it pays to look at what else is on the market to do the same job.

**What else is there?** Unlike most peripheral categories, the monster LCD display space is not exactly over-crowded. In fact, despite testing 30" or 32" displays from four other vendors, there is only one, from Dell, which competes directly with Apple's ACD30. The Dell 3007WFP 30" Digital LCD Monitor, for \$2899, is a direct competitor with identical resolution and an identical demand for a dual-link DVI graphics card. Similar sized displays from LG, Samsung and NEC can be driven by any VGA-port equipped computer, to a resolution of "only" 1366x768. These displays are not designed for you to sit in front of – rather, just like the huge screen at the local cinema, they are designed to be viewed from several metres away.

NEC provides a hint as to the intended market for its LCD3210 32" MultiSync LCD Monitor with the words "Public Display" emblazoned on the shipping carton. These three lower resolution large displays are designed to be hung on the wall in your restaurant or train station, where customers and passengers can look at the computer screen from below and still be able to read the words. For that reason, the range of input options on the NEC, Samsung and LG is extensive. They can all take a feed from multiple PCs, DVD players, tuners and RGB signals in both composite and component flavours.

Neither the Apple nor the Dell displays can accept any input source other than their DVI sockets, so no, you can't use them as a replacement TV unless you route the TV signals through the Macintosh first. They both support resolutions about twice that required for HDTV so it would be overkill if your intention is to upgrade your TV and your Mac display by only writing one cheque. Unfortunately, the other three screens, which could do double duty as both Macintosh displays and reasonably large TVs, aren't really designed to sit in front of your face. If you need to run your Macintosh from across the room, with a wireless keyboard, then one of these would be an excellent choice.





## LCD4610 46" MultiSync LCD Monitor SyncMaster 323T 32" LCD Display



Multiple input sources,  
humungous size

Not designed for desktop use

DVI, VGA, RGB composite  
and component

\$9275

NEC

NEC Australia 131 632

[www.nec.com.au](http://www.nec.com.au)



Multiple input sources

Not designed for desktop use

DVI, VGA, RGB composite  
and component

\$3250

Samsung

Samsung Australia 1300 369 600

[www.samsung.com/au/index.htm](http://www.samsung.com/au/index.htm)

Perhaps a Mac Mini with a copy of Front Row installed might make sense driving one of these displays, allowing you to surf the net and actually read what's written — which most standard TVs lack the resolution to do very well. Don't expect to save money with this plan — a decent plasma TV can be had for less money, from the very same companies, if your primary goal is to upgrade your lounge room. Plus you might have enough left over to buy an iMac.

**In play.** Looking at the two monitors which are designed to be in your face, the quality and colour of the display is simply stunning — it only takes a few days before you start to think 30" is just about the right size for a display panel. Apple's floating in space design is certainly chic, but the vendor wants slightly more than \$1000 extra folding stuff compared with the Dell offering. Despite asking for less money, Dell also includes camera-card slots on the side of the display, which could be a very handy feature if you are using the monitor in a photographic studio. Although Apple also has some ports extended to the monitor from the back of the Macintosh, for USB and FireWire devices, you need to provide your own separate card reader.

Because they aren't designed to replace TV sets, neither the Dell nor the Apple units came equipped with remote controls — there's nothing to control remotely except the power switch anyway. Of course the monitors-for-all-reasons from LG, Samsung and NEC all come with remote controls, as you'd expect with displays that can handle numerous inputs, and with their picture-in-picture facility, two can even be displayed at once. There are several training scenarios that might find this feature useful.

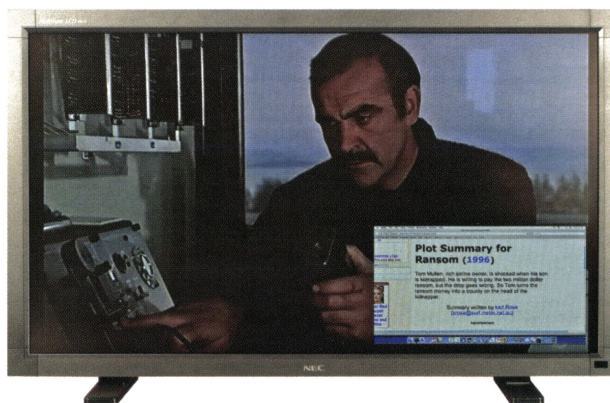
If you do need to feed multiple sources into your wall-mounted display, the NEC does a far better job with movies and TV content



## When only the biggest will do

If thirty diagonal inches of screen real estate still isn't enough, and money is no object, take a look at the NEC LCD4610 46" display. You could park this thing at one end of an aircraft hangar and still be able to read the text from the other end of the building. As with the NEC 32" model, this is designed to be a "public display" and sitting in front of it at your desk is simply not possible. Although it advertises the same 1366x768 resolution as the other public display models, we were able to drive it at 1600x900, which lets you open several more windows before overlapping is required.

The range of input options is numerous, similar to the smaller public displays, and the screen can be zoomed to suit your purpose and even vertically flipped if you decide to mount it hanging upside down from a ceiling. It can handle two Macs at once, as well as DVD, and RGB composite and component. With the Picture-in-Picture option you can be playing Unreal Tournament while keeping an eye on the movie channel, or watch a movie while reading the review on IMDB.com. You'll get very little change from \$10K for one of these monsters, and you will definitely need two people to set the monitor up, as well as a fair bit of room to park the thing. What passes for a decent sized TV-stand suddenly looks like a postage stamp when the NEC LCD4610 is in residence. If you like multi-player games, perhaps you could pool resources with a few friends — about ten of them should do it.



than the other two vendors can manage. The picture quality still isn't quite as good when watching movies as it is with a plasma display, but the NEC LCD3210 has almost eliminated the "mannequin skin" that most LCD TVs produce when asked to render faces. The NEC also has superior shadow detail and very few ghost trails on fast moving objects.

**Australian Macworld's buying advice.** If you want the most real estate you can get, and you want it right in front of your face for creative work, either the Apple or the Dell will more than satisfy, but it's hard to look past the \$1000 savings on offer from Dell. If you need to mount your Macintosh display on the wall, the NEC wins easily despite not being the cheapest on offer. ☞



■ Type	Intel-based professional laptop
■ Rating	★★★★
■ Pros	Classic design; runs Universal applications quickly; bright screen; integrated iSight camera; comes with Front Row application and remote; innovative MagSafe power connector; improved wireless range
■ Cons	Non-native apps can run slowly; optical drive inferior to PowerBook G4; no FireWire 800 port; no PC Card slot and few ExpressCard/34 cards on the market; intermittent processor noise on some systems; screen slightly shorter than PowerBook
■ RRP	\$3999; 1.83GHz model available for \$3199
■ Manufacturer	Apple Computer
■ Distributor	Apple Australia 133 622
■ Reviewer	Jason Snell
■ Hot links	<a href="http://www.apple.com/au/macbookpro">www.apple.com/au/macbookpro</a>

## MacBook Pro/2.0 GHz

*PowerBook's successor combines new technologies with familiar look*

IT'S got a new name on the outside and a new processor on the inside, but the MacBook Pro is in many ways indistinguishable from its predecessor, the 15-inch PowerBook G4. Yes, this first MacBook Pro model is a huge step forward in many different ways, but it also provides reassuring continuity for long-time PowerBook users.

As you'd expect from the first model of its kind, the 15-inch MacBook Pro is a complicated beast. (We tested the 2GHz model.) When it comes to running Universal applications, it's clearly faster than the PowerBook. Yet it also has some quirks, and actually lags behind the PowerBook in some hardware and software areas. Still, the MacBook Pro's huge potential can't be fully realised until more programs are released that can take advantage of its strengths.

**Making the migration.** It's a potentially obvious point, but important to note: these Intel-based Macs are still Macs through and through. We put a PowerBook G4 into FireWire Target mode and attached it to the MacBook Pro, transferred its files via Apple's built-in Migration Assistant utility, and had the new laptop up and running in a couple of hours with no major hitches. All desktop windows were in the right places, file icons were properly strewn about the desktop – the new MacBook Pro felt exactly like the old PowerBook.

After the migration was complete, we experienced several annoying slowdowns, but a trip to Apple's Activity Monitor utility revealed that the culprit was Spotlight, which had to index the MacBook Pro's hard drive after the Migration Assistant utility finished its transfer. Once Spotlight was done with its work, most common operations felt much more responsive than they had on the PowerBook. (We did experience a few unexpected appearances of OS X's spinning rainbow cursor of doom, but they abated after we discarded several old items, including Smart Crash Reports and SIMBL, that the Migration Utility had transferred to our InputManagers folder.)

Although several of the bread-and-butter applications we used aren't currently available in Universal versions, we rarely perceived any serious slowness in those applications. Occasionally Microsoft Entourage got a bit poky, and Microsoft Word seemed



somewhat confused when we tried to use the MacBook Pro's Scrolling Trackpad feature. Generally, applications running under Mac OS X's Rosetta code-translation technology, which converts instructions meant for PowerPC processors into those suitable for Intel chips, worked quite well.

When it comes to Universal applications running natively on the MacBook Pro, they definitely felt perkier than on the PowerBook – and the entire computing experience simply felt more responsive than the 1.67GHz PowerBook G4.

**The speed's the thing.** As with the first edition of the Intel-based iMacs, the focus on these new MacBook Pro systems is going to be on their speed. For the past few years, PowerBook users have griped about the relatively small speed improvements in the product line. Since Apple first announced its switch to Intel chips, there's been intense speculation that Intel-based laptops would be able to perform at speeds that were simply unavailable to PowerBook G4 users.

The MacBook Pro specs would seem to indicate that a major speed boost is in the offing: compared to the PowerBook G4's relatively meagre specs (167MHz system bus, a single 1.67GHz G4 processor, and a Mobility Radeon 9700 video card), the MacBook Pro's architecture (667MHz bus, dual-core 2.0GHz processor, and Mobility Radeon X1600 card) makes it a potential speed demon.

So does the MacBook Pro deliver on its promise? Unfortunately, there's no easy answer when it comes to speed. Like the iMac Core Duo, the MacBook Pro is the first Mac system of its type to feature a dual-core processor, the equivalent of two processors on a single chip. As a result, gauging its actual speed is a whole lot more complicated than back in the days when processor clock speed alone dominated the discussion.

## MacBook Pro/2GHz Tested

	Adobe Photoshop CS2 SUITE	Cinema 4D XL 9.5.21 RENDER
MacBook Pro Core Duo 2GHz	2:41	1:11
15-inch PowerBook G4 1.67GHz	1:34	3:57
14-inch iBook G4 1.42GHz	1:49	4:31
20-inch iMac Core Duo 2GHz	2:31	1:11
Power Mac G5 Dual Core 2GHz	<b>1:03</b>	<b>1:07</b>
	< Better	< Better

Best results in bold. Reference system in italics.

All scores are in minutes:seconds except for Unreal Tournament results, which are in frames per second. All systems were running Mac OS X 10.4.5 with 1GB of RAM. The Photoshop Suite test is a set of 14 scripted tasks using a 50MB file. Photoshop's memory was set to 70 percent and History was set to Minimum. We rendered



So yes, the MacBook Pro is generally faster than the 15-inch PowerBook G4 at running Universal applications. How much faster depends on several factors, including how well-optimised for Intel processors the applications are, how much the applications take advantage of the MacBook Pro's fast video card, and how well the software supports multiple processors.

Some of our tests show major MacBook Pro speed boosts when compared with the PowerBook G4. The 3D rendering program Cinema 4D XL was 3.3 times as fast at rendering a scene; the graphics-intensive game Unreal Tournament 2004 had a frame rate of 2.2 times better; and an iTunes encode was 1.3 times as fast. Other tests of less processor-intensive tasks, such as creating a 1GB Zip archive in the Finder, showed more modest gains.

Given that the professional applications that are part of Apple's Final Cut Studio suite have long been designed to take advantage of Power Mac models with multiple processors, we would anticipate that the Universal versions of those applications will see dramatic speed boosts on the MacBook Pro. Those applications aren't expected to arrive until April, so we weren't able to test them, and we did not receive the Universal Logic Pro 7.2 version in time to test it for this review.

The other major application that many MacBook Pro users will want to run is Adobe Photoshop CS2, and it may be a while before a Universal version arrives. In the interim, the MacBook Pro will run Photoshop via Rosetta. We found Photoshop to be quite usable on the MacBook Pro, but it doesn't run nearly as fast as it does on the most recent top-of-the-line PowerBook. The 1.67GHz PowerBook G4 performed our suite of 14 scripted Photoshop tasks 1.7 times faster than the 2GHz MacBook Pro. As a result, it's hard for us to recommend the MacBook Pro to heavy Photoshop users until Adobe ships a Universal version. However, casual Photoshop users should be fine.

**New Book, similar cover.** In terms of physical appearance, the MacBook Pro is almost identical to the 15-inch PowerBook G4. It's slightly wider and thinner, and weighs the same. The

MacBook Pro's trackpad, mouse button, and front latch are also slightly wider than the PowerBook's.

However, the MacBook Pro's screen is 60 pixels shorter than the most recent 15-inch PowerBook G4, offering a native resolution of 1440x900 pixels. The screen is definitely brighter than the PowerBook's. Nestled right above the screen is the MacBook Pro's built-in iSight camera, and next to it is a green light that comes on whenever the camera is in use. (The iSight worked well in all the video chats we tried, although because the MacBook Pro's microphone is embedded in the left speaker grille, our iChat audio was restricted to the right speaker and sounded a bit too quiet.)

The MacBook Pro is Apple's first laptop model to come with an infrared remote control and Front Row software, and there's a corresponding infrared port on the front edge of the system, to the left of the latch. The version of Front Row on these systems is essentially the same as the one on Apple's iMacs – and includes all the same limitations, including a lack of robust music-play features and weak video- and slideshow-playback controls.

That said, the combination of Front Row, a remote control, and a small Mac that can process external video output makes for some very interesting scenarios. For example, you can use the MacBook Pro and a video adapter to drive a TV in a home theatre. Unfortunately, I wasn't able to close the MacBook Pro, attach it to my TV set, and then recline with the included remote – the MacBook Pro wouldn't stay awake. Plugging a mouse into one of the MacBook's USB ports worked, but it would be nice if it were easier to use the MacBook Pro as a TV or projector-playback system.

Users of the last-generation PowerBooks will notice that the MacBook Pro is also missing several features found on those models. The S-Video port is gone, although Apple's DVI-to-video adapter easily replaces it; as with the iMac, the MacBook Pro has no modem, so those who need one will need to invest \$79 in Apple's USB modem; and the PowerBook G4's FireWire 800 port is also a goner.

Adding FireWire 800 to the MacBook Pro is possible, but it requires use of the ExpressCard slot, a new slot that replaces the PowerBook G4's PC Card slot. The ExpressCard/34 slot lets cards run at full PCI Express speeds, but it's incompatible with PC Cards

Duplicate File	iMovie 6.0.1	iTunes 6.0.3	Microsoft Word Scroll	Start Up	Unreal Tournament 2004	Zip Archive
500MB FILE	AGED FILTER	MP3 ENCODE	500 PAGE DOCUMENT	BOOT TIME	AVERAGE FRAME RATE	1GB FOLDER
0:32	1:08	1:33	2:07	0:32	51.6	3:08
0:32	1:50	2:00	1:31	0:40	23.0	3:29
0:49	2:07	2:19	1:34	0:43	<b>14.1</b>	4:33
<b>0:18</b>	1:02	1:25	1:58	<b>0:29</b>	51.6	<b>2:33</b>
<b>0:18</b>	<b>0:50</b>	<b>0:57</b>	<b>0:42</b>	0:42	43.7	2:51
<Better	<Better	<Better	<Better	<Better	>Better	<Better

a project in Cinema4D. In the Finder, we duplicated a 500MB file. In Microsoft Word, we scrolled through a 500-page document. We recorded the amount of time it took for each system to start up. In iMovie, we applied the Aged video effect to a 1-minute movie. We converted 45 minutes of AAC audio files to MP3 using iTunes' High Quality setting. We used Unreal Tournament 2004's Antalus Botmatch average-frames-per-second score; we tested at a resolution of 1,024 by 768 pixels at the Maximum setting with both audio and graphics enabled. We created a Zip archive in the Finder from a 1GB folder. — Macworld Lab testing by James Galbraith and Jerry Jung



(as well as wider ExpressCard/54 cards), and currently there aren't very many ExpressCards on the market. Still, we expect that the MacBook Pro will spur development of Mac-compatible ExpressCards, not only for FireWire 800 but for numerous other uses, including support for other storage formats, expanded wireless connectivity, and video-out capability.

It's important to note that all of the mobile broadband providers in Australia, including Telstra, Optus and Vodafone, use PC Cards, so if you're a user of those services hold back on your MacBook purchase until your provider announces support for the new card format. We were unable to test any ExpressCard/34 cards in the MacBook Pro.

**Battery life.** Unlike the data accompanying previous laptop models, Apple has refrained from making any claims about the MacBook Pro's potential battery life. Testing battery life is extremely tricky, since different types of usage (and different energy-saving preferences) can dramatically vary the results of battery life tests as well as real-world total battery life. In an all-out power drain test, in which we turned off all power-saving options and played a DVD on both the MacBook Pro and the PowerBook G4, the MacBook Pro died four minutes earlier than the PowerBook — a test that suggests the two models' battery life will be similar. In regular use over several days with normal power settings, we found that we could get more than three-and-a-half hours' worth of work done with charge to spare. As a result, we think it's safe to say that while the MacBook Pro isn't going to win any last-laptop-standing battery challenges, its battery life will be in line with the past experiences of PowerBook G4 users.

**Power? It's a snap.** It's hard to get people excited about a power cord, but Apple did its best when it introduced the MagSafe connector at Macworld Expo in January. The MacBook Pro's MagSafe port is a small rectangular indentation at the rear of the computer's left edge; the rectangular end of the MagSafe power cord attaches to it magnetically for a secure connection — but one that is easily broken under moderate force.

The idea behind MagSafe is that tripping over the laptop's power cord won't do something horrible like rip off the power jack or launch the computer off your desk and onto a hard floor below. It works as advertised: in several attempts to topple the MacBook Pro, the MagSafe connector did its job, releasing its attachment to the computer and falling harmlessly to the floor.

The cable connecting the MagSafe connector to the AC adapter's power brick is noticeably thicker and stiffer than the one on Apple's previous generation of laptop power cords, which is good news for anyone who has shredded one after many months of heavy use. The power adapter's power brick is larger, more the size of an AirPort Express than the previous-generation brick.

Hard-core PowerBook users (and IT managers, for that matter) will roll their eyes at the introduction of a new Apple power-cord style, because it will force them to buy more new adapters as supplements and extras. But it's been several years since the last time Apple switched adapter styles, and the advantages of the MagSafe connector are worth the slight inconvenience.



**All features great and small.** With a product as new and hotly anticipated as the MacBook Pro, there's an almost endless list of details that prospective buyers might be curious about. Here's a roundup of other items we noticed while testing this system:

> **Wireless range.** In our observations, the MacBook Pro appears to have better wireless range than the PowerBook G4. At the same distances, we were able to see more bars in Apple's Internet Connect utility and a higher signal strength in iStumbler on the MacBook Pro. However, when we tested an iBook in the same conditions, its performance was notably better than the MacBook Pro's.

> **Heat.** The MacBook Pro is definitely not a cool system. After an hour of use, we found ours to be quite warm, particularly on the left side toward the back. However, we didn't find the heat level uncomfortable, and it seemed roughly in line with the heat generated by PowerBook G4 models.

> **Noise.** In general operation the MacBook Pro is fairly quiet. However, several users of the first batch of MacBook Pro models have reported a quiet hum emitted by the computer under certain circumstances. We did notice this on a few of the MacBook Pro models we looked at, and while we didn't find it particularly distracting, it's worth noting in case you're someone who is particularly sensitive to noise and works in a quiet environment.

> **Optical Drive.** While the MacBook Pro massively improves most of the PowerBook G4's specs there's one area with a serious backslide: the optical drive. Because the MacBook Pro is thinner than the PowerBook, Apple had to use a new optical drive that's approximately three millimeters thinner. So rather than the optical drive in the previous-model PowerBook, which featured an 8x SuperDrive with dual-layer DVD burning support, the MacBook only contains a 4x SuperDrive model that can't burn dual-layer discs — hard-core disc burners be warned.

**Australian Macworld's buying advice.** The 2GHz MacBook Pro is a fitting successor to the PowerBook G4. While its new internal architecture makes it noticeably faster than its predecessor — and blazingly faster in certain high-end tasks — it's still comfortably a Mac laptop.

If most of the applications you use are available in Universal versions, or are relatively low-power programs running in Rosetta, buying a MacBook Pro will be to your advantage. If you're upgrading from a two- or three-year-old PowerBook G4, you'll notice a massive speed boost in Universal applications, while Rosetta applications will run at the speed you're used to.

However, if you rely on programs that won't run in Rosetta (for example, some of Apple's Final Cut Studio apps or Microsoft's Virtual PC), you should delay your purchase until Universal versions of those programs become available. If you use a resource-intensive program such as Photoshop CS2, or you need to wring every last bit of performance out of your system when you're on the road, you'll likewise be better off waiting until your software has been updated before buying a MacBook Pro. ☐



	Keynote 3	Pages 2
■ Type	Presentation Software	Word processor/page-layout application
■ Rating	★★★★	★★★★
■ Pros	Better drawing and image-editing tools; smoother workflow	Excellent page-management tools; convenient inline searching; includes table calculation tools; cool new graphics features; 3D graphs; can now access media not stored in iLife apps
■ Cons	Small thumbnails; no support for QuickTime VR; limited audio support	Some minor image-related bugs; limited table calculations; odd 3D graph manipulation; some comment information doesn't import from Microsoft Word; Mail Merge feature works only with Apple's Address Book program
■ RRP	Available only as part of iWork '06 suite. Individual users \$119; Family Pack (up to five users in a single household) \$149	
■ Publisher	Apple Computer	
■ Distributor	Apple Australia 133 622	
■ Reviewer	Franklin N. Tessler	Jeffery Battersby
■ Hot links	<a href="http://www.apple.com/au/iwork/keynote">www.apple.com/au/iwork/keynote</a>	<a href="http://www.apple.com/au/iwork/pages">www.apple.com/au/iwork/pages</a>

## iWork '06

*Welcome improvements enhance Apple's productivity suite*



### Keynote 3 Keeps improving with age

At first glance, it's easy to dismiss Keynote 3 as a minor upgrade – even the icon hasn't changed. Lurking beneath the surface are many new features Keynote users have been clamouring for. Although the program still isn't perfect, those enhancements make Keynote an even more compelling alternative to Microsoft PowerPoint 2004.

**Easier graphics.** One of the features most requested by Keynote fans was a better set of built-in graphics tools. While you'll still need a dedicated program such as Adobe Illustrator for complex illustrations, iWork's beefed-up graphics tools should be adequate for most users. The new free-form Shape tool with Bézier-curve support is especially welcome. Keynote also now supports resizing of grouped objects, a feature that has been near the top of my wish list since the initial release. Like Pages 2, Keynote now lets you do basic image editing via a translucent, iPhoto-like palette with controls for changing brightness, contrast, and other parameters. Since your adjustments affect the way Keynote displays the image, not the underlying image itself, you can undo your changes at any time with a single click.

Image masking, first introduced in Keynote 2, is also greatly improved. In Keynote 3, you can use geometric shapes to reveal any part of an underlying image – handy when you want to

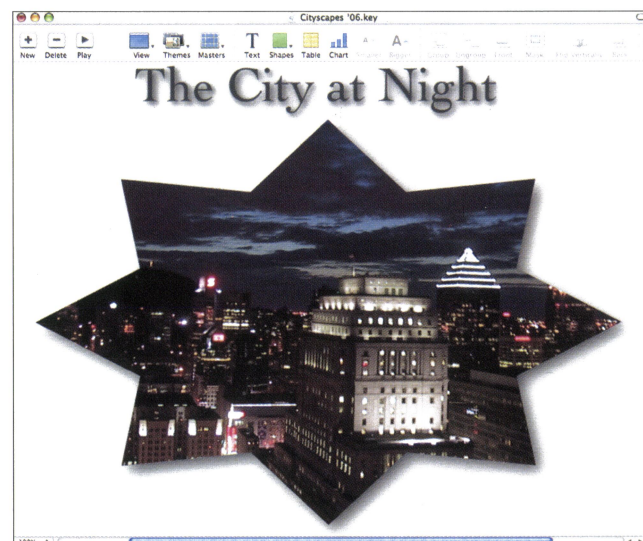
cut Aunt Edna out of a family picture, for instance. The new reflection effect places an inverted, semi-transparent copy below any selected image to make it look as though it were propped up on a shiny surface. (The effect doesn't work for QuickTime movies, however.)

Keynote's theme library includes a few more choices than before, and several themes are now available in higher resolutions, up to 1920x1080 pixels. The Slide Inspector has several clever 3D-transition options, including one that simulates a revolving door.

**Bullets, builds, and charts.** Another feature high on many wish lists was support for more than one bulleted text box per slide. That wish has been granted. Keynote 3 lets you add bullets to any text box. Because Keynote 3 lets you individually style each paragraph in a bulleted text box, you can now do things like display two text bullets, insert a picture, and then proceed with the remaining bullet points. Doing the same thing in Keynote 2 required splitting the builds across several slides. Keynote 3 also supports builds in masters, so you no longer have to edit builds slide by slide.

In addition to 2D charts and graphs, iWork '06 sports 3D charts with interactive controls that let you tweak the lighting and alter

**Make your own mask.** In Keynote 3, you can use any geometric shape as an image mask.





the viewer's perspective; the expanded chart repertoire includes scatter plots. Keynote's tables now function like rudimentary spreadsheets: in addition to simply displaying static text and numbers, you can perform simple calculations such as addition and multiplication on a range of table cells, and you can tell Keynote to sort table rows based on the contents of any column.

**Smarter workflow.** Keynote 3 finally includes a functional slide sorter that lets you select any subset of slides and drag them anywhere in the current presentation or into another open presentation. The individual slides are larger than the Navigator's tiny thumbnails, but they're still too small for many eyes — Apple ought to add a sliding magnification control like the one in iPhoto.

Presenter Display, which shows the current and upcoming slides on the presenter's screen, now has a menu-bar indicator that shows when Keynote is ready to display the next slide. Another new option lets you use Exposé and Dashboard during a slide show, so you can easily switch from your presentation to an application or a widget. Keynote 3 also gives you greater control over QuickTime movies while they're playing in slides.

Keynote's new comment feature lets you add text notes to slides — handy if you collaborate on presentations. (Comments stay hidden when you run the slide show.) If you have to share your presentation with people who don't have Keynote, you can now export your presentation to iDVD or as HTML, and new PDF-export controls include the option to save every stage of a build on a separate page.

**Missing in action.** Despite its many improvements, Keynote 3 suffers from a few omissions. For example, it doesn't let you interact with QuickTime VR movies during a presentation, and you can't embed hyperlinks to applications or documents. Unlike PowerPoint 2004, Keynote doesn't let you record narration for slide shows unless you use another application, and its support for audio files that span multiple slides is limited. Keynote's uncluttered interface is more accessible than PowerPoint's, but controls for setting attributes for text and graphics are spread across several Inspector tabs. Although you can cut and paste styles between objects, Keynote would benefit from a palette with named styles.

Keynote 3 can read older presentations, and an option in its Save dialog box lets you save in iWork '05 format. There's a bug that alters the formatting of text in older imported presentations, which you must then manually clean up — Apple is aware of the problem and promises a fix.

**Australian Macworld's buying advice.** The latest version of Keynote builds on its predecessor's considerable strengths while making a sizable dent in a shrinking list of missing features. If you're new to Keynote, or if you're still using Keynote 1.1, iWork '06 is well worth its price. Keynote 2 users may grumble about Apple's lack of upgrade pricing, but Keynote 3 lets you do things that would have been difficult or impossible to do before, or that would have required another application. For many presenters, that's enough to justify the price. 🍎



## Page 2

Fixes bugs and adds features

**I**T'S been a year since Apple released Pages, the word processing and page-layout portion of the dynamic iWork duo — and what a difference a year makes. While I would like to have seen some of the application's earlier weaknesses remedied sooner, I'm pleased that the new version of Pages is everything I hoped the initial release would be, and more.

Pages 2 is an excellent word processing application that does double duty as an equally stellar page-layout program. Designed to take advantage of all your iLife media, from photos to movies and music, Pages makes it easy to create everything from basic word processing documents to eye-candy-rich brochures, reports, and posters. While it lacks some of the features AppleWorks users would want in a full-blown replacement — namely, a spreadsheet application — it far exceeds AppleWorks when it comes to creating professional-looking documents. (Keynote, the other half of iWork, also has new table calculation capabilities.)

**The fixes are in.** In Apple's first release of Pages, several small details limited the application's usefulness. The most significant was page management: it was impossible to rearrange or easily delete pages in a document. Not anymore: the program now includes a thumbnail browser, accessed from the toolbar. You can use it to move or delete pages, and it does double duty as a way to navigate quickly between all the pages in a document.

Version 1's image shortcomings are also a thing of the past. Documents containing images with drop shadows now retain those shadows when exported to PDF files and viewed in Adobe Acrobat. EPS (Encapsulated PostScript) files now import correctly into documents, and the Media Browser, which was originally limited to browsing iLife media, can now view other images on your hard drive. Unfortunately, selecting your personal folder of images is not as simple as pressing a button — you'll need to drag your selected folder from the Finder to the Media Browser — but at least now you have this option. The only image problem I had was with Raw camera files in documents. While these images were viewable in Preview, they appeared pixelated both in Pages and when we printed the documents (Apple is looking into this bug).

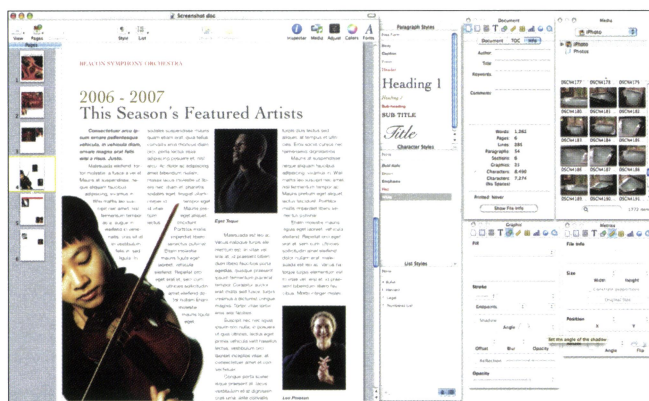
Pages also includes a Mail Merge function that allows you to merge data from Apple's Address Book app into Pages documents. Pages makes ample use of this feature in several of the 66 document templates that ship with the program. For example, open the new Expense Report template, and you'll see that Pages has already filled in your personal information, from the card you've marked as "me" in Address Book. The Mail Merge function's connection to Address Book does have some limitations though, especially if the names you use for mass mailings aren't the same names you want to keep in your personal address book.

**Slick additions.** Fixing what ailed the first version of Pages would have been enough to make me happy, but Apple has also



added several new features. Pages 2 lets you select images or text and then add comments to them. These comments transferred nicely when I exported my documents to Word, but comment IDs and date information were missing when I created comments in Word and tried to view them in Pages. Apple expects to fix this bug soon. Pages also includes a new Auto-Correction tool, which corrects commonly misspelled words as you type, and a new Search bar that, as with Preview, displays every instance of your search word or phrase in a sidebar. Selecting one of these instances brings you to the page in your document where the

**Flexible page handling.** Pages' new Thumbnail drawer (A) allows you to select, rearrange, or delete pages with ease.



word or phrase appears, with the text automatically selected on the page. You can also use the Auto-Correction tool to create your own shortcuts for commonly used long phrases.

On the graphics front, Pages now includes a reflection option for images, which makes it appear as if your images are resting on a highly reflective surface. This looks especially nice on dark backgrounds. The program also includes an Image Adjustment panel, similar to the one in iPhoto, that lets you change image settings such as brightness, contrast, and saturation. Graphs in Pages can now be displayed in three dimensions, but the tool for manipulating these 3D graphs is cumbersome – which seems odd given how easy it is to manipulate other graphics in a document.

Pages' new Table tool allows you to perform minor calculations. The program supports six basic functions: Sum, Average, Min, Max, Count, and Product, which will take the numeric information you enter and automatically calculate the totals. This is a welcome new feature, but unfortunately Pages is still missing a fully functioning spreadsheet tool for performing more-complicated calculations.

**Australian Macworld's buying advice.** Pages 2 is a significant improvement on the previous version. It provides excellent word processing features in a package that can also act as a top-notch desktop publishing application. It is a versatile and powerful program that will fill a multitude of educational, personal, and professional needs. 

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■ Type	Strategy game
■ Rating	★★★
■ Pros	Multiplayer support; updated for modern systems
■ Cons	No upgrade path for gamers who purchased the previous version; no cross-platform multiplayer gaming
■ RRP	\$65
■ Publisher	Aspyr Media
■ Distributor	Try and Byte 02 9906 5227
■ Reviewer	Peter Cohen
■ Hot links	<a href="http://www.tryandbyte.com.au">www.tryandbyte.com.au</a>

## Civilisation III: Complete

### Get ready for IV

WHEN Aspyr Media announced last October that it planned to bring Civilization IV, the latest release of the much-loved strategy series, to the Mac, the company threw in a special bonus – a resurrected and improved version of Civilization III. Now repackaged as Civilization III: Complete, the new version not only runs on newer systems, but also includes two expansion packs never before available on the Mac.

Civilization is a turn-based strategy game in which you oversee the development of a civilisation from the Stone Age to the modern era – and even a bit into the future. You guide every aspect of your civilisation, including agricultural growth, diplomacy with neighbouring nations, the refinement of goods, the development of culture, and the machinery of war.


Meanwhile, your competitors – computer-controlled or human – try to do the same thing. Eventually you'll clash, and

depending on how honed your diplomacy skills are, you may find an important trade partner or create a deadly enemy you'll have to fight tooth and nail.

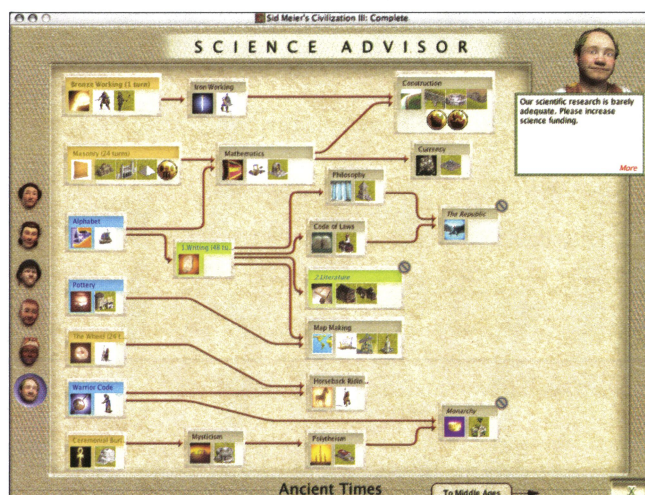
Civilization III includes two add-ons that never made it the Mac – Conquests and Play the World. The more noteworthy of these is Play the World. It adds a multiplayer component that lets you compete against other Civilization III enthusiasts online – something Mac fans have longed for. Unfortunately, the multiplayer support is not cross-platform.

The Conquests add-on provides nine additional scenarios to play through – campaigns that will test your mettle in a variety of times and places including ancient Mesopotamia, the Roman Empire, the Napoleonic Era, and so on. This add-on emphasises civilisation-to-civilisation combat. So if you're a lover, not a fighter, you may not find much to like here.

Thanks to the work Aspyr has done, Civilization III runs well on today's modern systems – some of the clunkiness that dogged the older version has been eliminated. (You need a 500MHz G4 or more recent Mac to play.) The bad news is that there's no upgrade discount for Mac users who bought the previous version of the game. You'll have to buy the whole collection again.

**Australian Macworld's buying advice.** Civilization III: Complete is really just preparation for the big event: Civilization IV, which should arrive this autumn. If you've already played through MacSoft's version of Civilization III, I doubt you'll find enough here to warrant paying full price. For strategy-game fans who are new to the series, Aspyr's conversion will be a welcome addition. 

**I built this city.** Civilization III: Complete has all the challenge of the original game, as well as multiplayer support.





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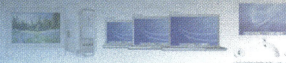
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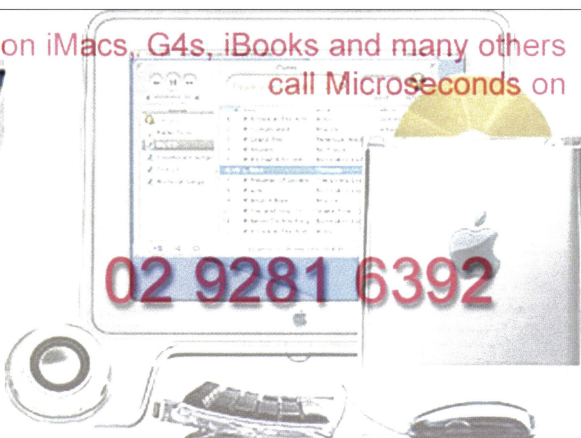
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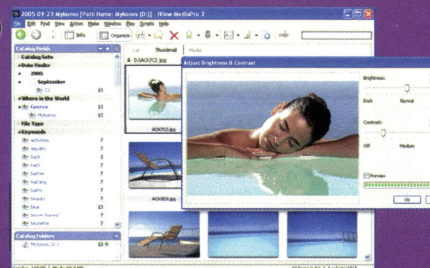
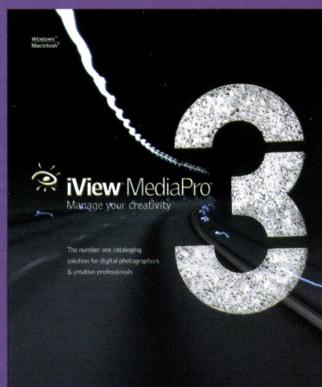
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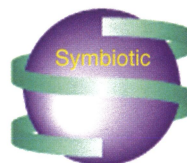
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Something to chew on.

By Alex Rieneck.

## How much is elegance again?

HERE is a very precise and specific point that defines the difference between noticeable and thoroughly unforgivable. Everyone knows the feeling, when a general sense of irritation and sullen grumpiness suddenly bursts out into bona fide pissed-offness, but it is a feeling that must be examined on a case-by-case basis without any recourse to general rules or big theories. Specifically, it is the point when, say, the train stops being "late" and becomes "burn down the ticket office".

It is, of course. The Line.

I bought a DVD burner the other week. For reasons too complicated to go into here, I had a mid-specification Windows XP box and needed it to burn video DVDs that could be played in stand-alone DVD Players. So, I went to the local nest of Chinese computer shops and bought a new Asus 1608P2S dual layer drive right off the shelf. I took it home, stuck it into the Windows box, and Windows simply accepted that the drive was a drive, and waited for software.

Monkey follow instructions. It wasn't hard. There were boinking noises that showed that a small but happy boink lived somewhere inside. Ten minutes after I entered the room, the box had a new DVD drive in it.

I will admit that I was surprised up to this point. There had been no blood. I had not needed to draw upon my rich and, some say inspired, grasp of English scatological terms. Best of all, there was no smoke.

I immediately sat down, (there was a distinct deadline here that does not need explaining) stuck a disk in the drive and opened the bundled software (Nero Express). There were buttons to be clicked, boxes that needed ticks put in them, and I had to make decisions between DVD menu backgrounds. The DVD creator wizard made things pretty seriously dull. Bland, even.

Within another fifteen minutes, the machine was rendering the video prior to burning the disk, and I was making a belated cup of coffee and polishing up a few choice terms for later when the disk failed for some "unexpected" reason, or other. All in all, I was in a good mood. The disk took about two hours to finish. It worked perfectly. In every player I have thrown it into. The menus worked and were reasonably pretty. All up, I lacked anything to swear at.

What's my point? The dual layer drive, the software and the box that it all came in cost exactly seventy Australian dollars. It is really depressing to think how hard it would be to deliver the same sort of upgrade to just



### Hot Links

[au.asus.com/products.aspx](http://au.asus.com/products.aspx)

The burner

[www.nero.com](http://www.nero.com)

The software

[www.apple.com/ilife/idvd/](http://www.apple.com/ilife/idvd/)

Apple's solution

about any Apple machine. Worse than that is thinking about how much it might all cost, especially if Apple was in charge of designing the price structure. Yeah, sure, (at long last) Apple no longer offers the choice between "Combo" and "SuperDrives," but when it did, the differential was in the hundreds of dollars — when the difference on the actual hardware was far, far, less. Worse even than that, this entire cobbled-together-out-of-mostly-obsolete-parts machine that burnt DVDs cost about the same as the Lacie D2 external DVD Burner that I use with my

PowerBook. Almost. Sort of. Close enough.

I don't want to be churlish here. I understand all too well that Apple has overheads and has to pay school fees and stuff, but the recent salad days are drawing to an end. Within a few months, Windows Vista (née Longhorn) will be released and the media will soon do its best to render it compulsory. Apple will cease to be fashionable. Instead, amazing new Microsoft™ inventions such as Widgets and enhanced searching and cataloguing of hard-drives (just like Spotlight) will make Apple's "premium price structure" even less attractive to anyone on any sort of a budget.

After all, if the Wintel camp can deliver functional dual-layer burners at less than Apple charges for a premium mouse and can also (probably) deliver something reasonably pretty and crash free, Apple will no longer be competing against a shambles beset by spyware, but against a powerful opponent that can become "inspired" by the best that Apple can offer, and who could just about afford to market Saddam Hussein as the next Pope. Successfully.

And as all this happens, Mac OS will be running on Intel chips, and will, according to the naysayers anyway, be only really a "competing operating system". Worse than that, the crown jewel in Apple's tiara will be the MacBook Pro, which is priced at noticeably over three thousand bucks.

Now, I don't mean to be frightening the horses here, but it seems to me that if a machine is much the same hardware, and approximately the same spec as other machines a bit just like it, then the price disparity should perhaps not be so effing vertical that it has an ugly effect on people's buying choices and, consequently, on Apple's market share. Remember that Line we were talking about?

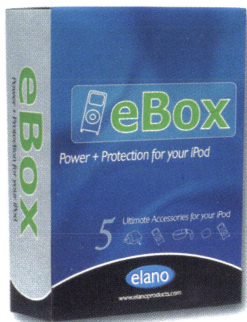
In other words, for the cheap seats: "Steve, bottom-line prices are now even more important. Really". ☹

**Alex Rieneck has been a technology commentator since the days of the bone abacus.**

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